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## ALCOHOLIC PSYCHOPATHIES.<sup>1</sup>

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The subject I have chosen for this paper is one which may perhaps appeal the more readily to those who are not solely alienists, firstly because of the universal interest that is being taken at the present time in the question of the abuse of alcohol, and secondly because mental disorders the result of alcoholism are of not uncommon occurrence in the experience of most practitioners.

In the brief scope of this paper, I cannot do more than outline the various forms in which alcoholic insanities manifest themselves, and it is remarkable how varying they may be, under one common factor.

Possibly these manifestations depend on the quality and character of the alcohol taken, on the susceptibility of the person taking it, and the period over which the excessive indulgence extends. The degree of concentration of the beverage no doubt governs to a great extent the damage to the nervous system. Further, the higher alcohols and aldehyds found in many brandies and whiskies are said to be more pernicious than ethyl alcohol.

At the same time, it is hard to get away from the view that presupposes a defective heredity or a structural defect of nervous tissue providing the subject with a constitution which is peculiarly susceptible to the influence of alcohol. In fact, it is claimed by some observers that alcohol cannot initiate insanity except in certain predisposed subjects. I am not prepared to go so far as this. But it is significant that the subjects of alcoholic insanities usually show an unimpaired condition of those viscera which are expected to undergo cirrhotic changes in the sane alcoholic. This leads us to believe that only those who have stable nervous organisations can drink long enough to acquire cirrhotic livers and kidneys, and that if the brain is vulnerable, it will succumb first, and, *vice versa*, the chronic drunkard who has apparently retained his reason to the end, will usually or at least often show no structural change in his brain although his other organs may all be diseased.

In defining certain psychopathies as alcoholic, one must avoid including those disorders in which alcoholism is a symptom and not a cause of the insanity. Of this nature are some cases of epileptic insanity; or a man may drink to excess in the excited stage, or to drown his sorrow in the depressive stage, as the case may be, of manic-depressive insanity; or become alcoholic at the onset of general paralysis. One must therefore confine the term, alcoholic insanity, to those forms of mental disease in which alcohol has not only been the cause, but has so influenced the symptoms that they are in some

way special or peculiar, so that the mental and bodily results are specific.

Without going into subdivisions of the various alcoholic psychoses, and obscure varieties, it may be said that the forms we meet with are:

- a. Delirium Tremens.
- b. *Mania-a-potu*;
- c. Polyneuritic psychosis;
- d. Alcoholic pseudo-paresis;
- e. Chronic alcoholic hallucinosis;
- f. Alcoholic dementia.

*Delirium Tremens* is the most familiar and perhaps the most typical form of the acute alcoholic psychoses, and though this condition does not often come within the practice of the mental specialist, and is brief in duration, it is none the less a true toxic insanity. Although one would be disposed to regard it as a maniacal condition, a little reflection will show that it is really more of the nature of a motor-melancholia. The prevailing emotional tone throughout is one of depression. The sensory hallucinations are almost always disagreeable and terrifying. Many of these are actually illusions—misinterpreted sensations of irritations of the perceptive organs, and the alarming nature of these at times occasion suicidal or homicidal attempts.

Whether the disorder is due to the direct poisoning effect of the alcohol on the nervous system, or to a secondary auto-intoxication has been a subject of dispute. There is a great deal to be said in favour of the latter view. The presence in the system of an excess of toxic substances, as we know, stimulates the tissues to produce an anti-body, and it is conceivable that this anti-toxin is produced to such a degree in heavy drinkers as to act as a powerful poison, particularly when the neutralizing alcohol is suddenly withdrawn: or the resistive powers of the organism are reduced by injury or shock. This is confirmed by the experience of the sudden withdrawal of morphine or cocaine, as the case may be, from the narcomaniac. If delirium tremens be due to direct alcoholic poisoning, why does it often not develop until four or five days, or even, in some cases more than a week have elapsed since alcohol was last taken? Why does the toxic condition last for days or weeks after the alcohol must necessarily be eliminated from the body? Then again, it has been found that the administration of alcohol will frequently stave off and abort the full development of an attack that has already commenced.

Opponents of this view have made much of the fact that the sudden deprivation of alcohol in a drunkard who has not been subjected to an injury or disease does not usually cause delirium tremens; and also that the patient, at the onset of the disorder, has no desire for alcohol or even has a repugnance towards it. Another claim in favour of this view is the occurrence of this condition during a prolonged drinking bout, without any cessation

<sup>1</sup> Read at a meeting of the Victorian Branch of the British Medical Association, on August 4, 1915.

but actually with an increase of the quantity of alcohol taken. Here, however, it has often been observed that the gastric catarrh customary in these cases, either by reason of disturbance of function preventing the absorption of alcohol, or by persistent vomiting, actually does bring about a reduction or deprivation of alcohol, and although the man is drinking it, his tissues are not getting it.

*Mania-a-potu* is a condition often confused with delirium tremens, but differs entirely in its emotional tone and in the comparative absence of physical symptoms. These cases are rather rare and appear to be limited to those with hereditary or acquired neuropathic taint, usually young people. A very little alcohol is required to produce the disorder, the patient showing the most intense motor-excitement or a veritable fury and delirium with violent or homicidal conditions. They are completely unconscious of their acts and have no recollection of what occurs in them, whereas we frequently find the delirium tremens patient recollects, even if imperfectly, many of the occurrences in his delirium.

Cases of *mania-a-potu* are very sudden in onset and pass off in a few hours or less, as a rule. I have seen one which resembled the automatism of a post-epileptic condition.

*Polynuritic psychosis*, known as Korsakoff's syndrome, is one of the most interesting of the group of alcoholic psychopathies, inasmuch as it seems to be as complete a pathological entity as general paralysis. In the classification of insanity, so many forms merge one into another, and so often is it difficult to draw clearly defined distinctions between them (note, for instance, how dementia praecox is cut up under different headings by differing authorities), that it is satisfying to find the distinctly marked outline which surrounds this psychosis. The almost invariable association of peripheral neuritis with those cardinal features which characterize the disease: amnesia of a certain type, confabulations and pseudo-reminiscences, disorientations, and hyper-suggestibility: render this condition as a rule, almost unmistakable.

It is believed by several recognized authorities that alcohol is not the sole cause of the disease, but that other factors, viz., certain metallic poisons such as lead and mercury, syphilis, cancer, and wasting diseases, may induce the disorder. This may be so, but in my experience of a great number of cases during the past few years, it has not been possible to exclude alcoholic over-indulgence in any one of them, although lead poisoning, and other supposed causes have been present. In each case, when a non-alcoholic history has been offered, a careful investigation has shown, sooner or later, that prolonged alcoholism has existed, even though it may have ceased a comparatively long time before the incidence of the psychosis.

One of the most remarkable of the characteristics of this condition, is the frequency with which the memory is unimpaired with regard to events from childhood up to or shortly before the attack, while recollection of occurrences of a moment or two before may be entirely absent. Another, extremely

constant characteristic is that peculiar paramnesia wherein the patient believes he has taken a long walk just recently (although bedridden for weeks, perhaps). This is probably a memory-illusion, a misinterpretation of the neuritis of the limbs, with the sensation of fatigue.

This disease must be regarded not merely as a psychosis, but as an affection of the entire nervous system. The polynuritis is an essential accompaniment of the psychic aberration, and the evidence of its existence depends entirely on the care exercised in examination and the criteria demanded by the examiner. The presence of exaggerated patellar reflexes in an advanced case does not necessarily negative the existence of the neuritis, for John Turner has found, in a marked case of peripheral neuritis with very exaggerated knee-jerks, extensive degeneration of the posterior tibial nerves. However, it is practically the rule to find these reflexes absent or nearly so.

The disease with which Korsakoff's syndrome is most likely to be confused, is general paralysis, and I am not at all sure but that some of the cases of reported recovery from the latter disease that have been recorded in the past, were in reality Korsakoff's disease.

In both conditions, we may have altered facial expression, sluggish pupils, oculo-motor paralyses, speech disturbances, and impaired tendon reflexes. In general paralysis of the insane the amnesia is steadily progressive, and it is defective for remote events. The disorientation, complete in Korsakoff's, is only partial in general paralysis of the insane. The delusions in the latter are extravagant and absurd, and not reasonably possible, whereas in the alcoholic psychosis all the imaginary reminiscences are quite consistent with the circumstances of the patient, and wholly explainable by memory disturbances. Where the case is complicated by syphilitic conditions, the difficulty of diagnosis is undoubtedly great, and lumbar puncture and examination of the cerebro-spinal fluid will often then be necessary, before general paralysis of the insane can be excluded. It is most important from the point of view of prognosis, to be able to recognize Korsakoff's disease, for a great number of these patients, text books to the contrary, notwithstanding, recover at least partially and some, completely; perhaps a greater number than is usually believed.

I have found by far the larger number of patients recover from the neuritis much sooner than from the psychic disturbances, although I understand the experience of most others is the reverse. Occasionally, however, paresis of the extremities persists for many months after complete mental restoration.

*Alcoholic pseudo-paresis* is another form of psychopathy of very great importance, especially as regards diagnosis. It generally occurs as an episode of chronic alcoholism extending over a prolonged period.

Usually it comes on suddenly and frequently we find all the signs of general paralysis. Tremor of the face and tongue muscles, ataxia, pupillary phenomena, exaggerated knee reflexes, dysgraphia, and apoplectic attacks and convulsions. To com-

plete the resemblance to general paralysis, euphoria, carelessness, delusions of grandeur, and amnesia may all be present. It is necessary at first to give only a provisional diagnosis. The most important facts in differentiating between this psychosis and general paralysis of the insane are the history of prolonged drinking, and the regressive course which the disease takes, but there are other distinguishing features which help the diagnosis; the onset at an advanced age, the suddenness of the attack, the greater frequency and less severe nature of the convulsive seizures, and the more profound amnesia at an early stage. Here, again, lumbar puncture and the Wassermann reaction may clear up the diagnosis without further difficulty.

*Alcoholic hallucinosis*, although a fairly common psychosis in all institutions for the insane, does not appear to have received the detailed study which this symptom-complex deserves. It presents certain characteristic clinical features, viz., the sudden or gradual onset in an alcoholic of auditory (sometimes cutaneous) hallucinations, resulting usually in delusions of persecution, with anxious fear-reaction, or brooding, but without disorientation, or disturbance of perception or memory. The essential characteristic symptom is the auditory hallucinations; much more rarely are those of sight and smell, but parasesthesias are quite common. Sometimes the "voices" appear abruptly, but more often they begin by buzzing, ringing, or roaring sounds, developing gradually, it may be in a few days, or several weeks, into "voices" of a definite sound or character, and with varying degrees of distinctness. They are uniformly threatening, and dominate the whole attention of the patient. He hears threats, accusations of immorality, charges of infidelity, or of murder. In the latter connexion, no less than three patients are at present under treatment at the Receiving House from different localities, with hallucinations of "voices" accusing them, in each instance, of a murder.

As the psychosis develops there is a typical tendency to systemize the delusions. The most commonplace incidents are construed into evidence supporting the hallucinations and confirming the ideas of persecution. These patients as a rule are free from motor unrest, although brief exacerbations of excitement may occur.

The most important feature of the psychosis, next to the auditory hallucinations, is the affect of continual fear, especially in the acute stage. In milder cases it may be nothing more than an uneasy anxiety, but in the severer types, with fully developed hallucinosis, existence becomes a torture, and unlike the delirium tremens patient, he cannot be persuaded out of his fears. Suicide is consequently more than a dangerous possibility. Curiously enough, the fear-affect subsides to a great extent when the patient comes under institutional care, even though the hallucinations persist, as he feels himself protected from his enemies. The manner in which these patients recover is interesting, and is nearly always very gradual. The first feature to pass off is the fear-affect. Then the hallucinations begin to diminish in intensity and distinctness, and

become only occasional; subsequently they are not "voices," but buzzings, ringings, or humming sounds. A remarkable feature is also the suddenness of insight into the cause of their condition, and patients can, and often will, co-operate consequently in their treatment.

*Alcoholic Dementia*.—Dementia is the natural termination to all the foregoing conditions, but there is a form of lowered mentality, apart from acute insanity, which develops insidiously from the continued excessive use of alcohol, to which the term alcoholic dementia may be applied. Everyone in general practice has had experience of this form, in which there is a gradual and progressive deterioration, mental, moral, and physical. The mental enfeeblement is slow, but progressive. At first the patient loses his power of application for work, his self-control is weakened, his mind wanders, he becomes unreliable and untruthful. His judgement becomes impaired: all ambition and self-respect begin to go, and more or less complete demoralization ensues. These patients are usually very irritable, and show marked loss of memory, often to a most profound degree. The enfeeblement of will-power increases, so that initiation is lost, and all finer feelings. Fine tremors, mild ataxias, and often convulsions accompany the condition. These cases, although rarely much improved if advanced, are sometimes arrested in their progress, by treatment; but the majority progress to total obliteration of the mental faculties.

In this brief survey of the main points of the true alcoholic psychopathies, I have not included dipso-mania, which is really a periodic mania, a sort of equivalent of psychic epilepsy, wherein alcoholic excess is the result, not the cause, of the disorder.

In the statistical tables of our hospitals for the insane, alcoholic psychosis as such have not been reported, but are tabulated under the head of acute and chronic manias and melancholias, or toxic insanities, or dementia, according to the predominance of certain psychomotor symptoms, and emotional states. Seeing that the psychoses induced by alcohol present a fairly typical clinical picture, as regards ætiology, symptomatology, course, prognosis, and treatment, there is some claim for reporting them in a separate group.

As a final word, the question may arise: why is it that the same toxic agent, acting on the same organ under apparently similar conditions, produces in the one case Korsakoff's disease, in another pseudoparesis, in a third, hallucinosis, and so on? Is it the varying quality of the neurones in different individuals, or of the alcohol itself, or of sociological conditions that brings about such variable results?

#### CHRONIC DELUSIONAL INSANITY OR PARANOIA.<sup>1</sup>

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This is the term given to a special form of mental disorder, a constitutional anomaly rather than a disease, occurring in individuals capable of considerable education and attainments, but showing a mental kink that makes them a class distinct from

<sup>1</sup> Read at a meeting of the Victorian Branch of the British Medical Association, on August 4, 1915.



the rest of their fellows. It is a disorder of adult life, though a somewhat similar condition is seen in dementia præcox or adolescent dementia.

Paranoia is a well-marked and characteristic variety of the insane state, without the subjects of it exhibiting any definite loss of mental power, and in which the patient has fixed and systematized delusions, frequently of persecution, though not always. These delusions are due to abnormal emotivity or sensitiveness in certain directions. Judgements may be formed as the result of an emotion or a feeling that this or that proposition is true. It is a perversion rather than a weakening of the normal mind and is found in those who, owing to some malign heredity, are usually referred to as cranks, or eccentric; technically they are termed *mattoids*. Many members of the anti-this or anti-that league are typical examples of more or less mild paranoia of *mattoid* type. The character of the delusions of the *paranoiac* is based on the patient's inborn emotional attitude; in other words, on his temperament. Is he naturally suspicious, vain, ambitious, jealous or hypochondriacal? His temperament gives colour to the delusions he develops.

The recognition of paranoia of persecutory type is important, not from its frequency, but from the fact that such persons are often very dangerous, homicidal in fact; and they are the more dangerous because they are often able to conceal their delusions until an outbreak of a violent character occurs, possibly resulting in injury or death to others. It is a disorder essentially chronic, and progressive in its nature. It is incurable. There may be no dimming of the reasoning faculties upon subjects other than those involved in the particular mental defect associated with the case. The essential feature of the malady is found in the systematized and fixed delusions, frequently of persecution, but they may be of exalted and ambitious type.

The German Emperor affords a good example of a *paranoiac*; he entertains delusions of persecution, in that he says and believes other European nations have entered into a widespread conspiracy against him; he has delusions of exaltation and ambition, in that he regards himself as the mouthpiece of and co-equal with the Almighty; he also says he must have his place in the Sun, and have the world at his feet. That he is a homicidal *paranoiac* is abundantly proved by the murder of the innocents on the "Lusitania," a hideous atrocity, of which he has been found guilty. The Kaiser is a certifiable lunatic, and after the war he should be treated as such. Some writers think that after Germany is defeated the Kaiser will commit suicide; it seems to me more probable, however, that his abnormal egotism and insane vanity will preclude any such act on his part. He has lived, and he will die, a *paranoiac*.

There is marked disorder of judgement in the *paranoiac*, consequently he has no insight into his condition of mind. Through months, perhaps years, the delusions have been slowly evolved, elaborated and systematized; the mental change being so insidious that the patient's friends do not notice what is taking place. During all this time the patient has been assiduously adapting himself to his changing

ideas and growing delusions. He is cautious in conversation, and will evade answering questions as to his thoughts and impressions; for he, by this time, treats everyone with suspicion, if he is becoming the victim of persecutory paranoia.

The disorder is perhaps more frequently met with in men than in women, and in almost every case there is discoverable an insane or neurotic inheritance. The egotism of the *paranoiac*, which is usually present, is more a symptom of his mental obliquity than a cause of the complaint. A solitary, secluded life is very apt to produce a form of paranoia, when the soil is suitable.

*Symptoms of Paranoia.*—Dreams and half-waking fancies are misinterpreted. The individual becomes solitary and suspicious, the accidental omission of a greeting by a friend, a fancied slight, renders him mistrustful of that friend's sincerity. He begins to misconstrue the words and actions of those he comes in contact with. He thinks people in the street look askance at him, and he fancies he hears them passing disparaging remarks. He sees signs and hints everywhere, which he twists to fit his ill-balanced thoughts. He may see a sneer in every passing face; he notices and magnifies the veriest trivialities. He becomes morbidly introspective, and is constantly brooding over his false conceptions, which to him, of course, appear well-founded. He withdraws more and more into himself. It is now that he oversteps the border line of sanity, and becomes insane. I am dealing now with the genesis of the persecutory *paranoiac*. Consumed with his false ideas, newspapers and books contain more or less veiled reflections on him; a laugh or a cough by a passer-by is meant (so he thinks) as a sign of contempt. He tosses about at night, rehearsing all the fancied slights and sneers of the day, and never questions the correctness of his interpretations. His imagination runs on, unchecked by any logical criticism. The actions of a person in a frame of mind as is here indicated are a surer guide than his conversation as to mental unsoundness, for he usually, at this time, keeps a check on his words. It is in actions that a suspicious person displays his suspicion. Sometimes his resentment becomes so intense that he may assault, murderously even at times, his supposed persecutors. The progress of the malady is by this time hastened by the development of various hallucinations and disorders of sensation, which, to the patient's distorted reasoning, further convince him of the verity of his suspicious ideas, and his delusions become more organized. He now hears, actually, as he imagines, the sneers and insults of the passer-by, or of his persecutors, owing to the existence of auditory hallucinations. Again, he may imagine he sees or tastes poison in his food, or he may smell foul and harmful fumes that are, he says, forced into his house or room; he feels electricity or other unseen agency working on or in various parts of his body. Such patients often think that their thoughts are read by others, and this causes them to become recluses. No amount of argument will persuade these persons that their ideas are false and their suspicions groundless. "Voices" tell him that his life is in danger, that bands of conspirators or emissaries



from secret societies are on his track to murder him, that detectives are ever pursuing him. The "voices," or his false deductions, may tell him the names of his persecutors, and the methods they are going to adopt, or are adopting to injure him. At length he comes to regard almost everyone he is brought in close contact with as inimical to him. The paranoiac, both male and female, very often exhibits a marked sexuality, either normal or abnormal. As a consequence of their delusions the sufferers from persecutory paranoia may at any time become dangerous, and even homicidal, dealing out death to the supposed persecutor, or they may be incited to attack the first person they meet, as all the world, to their ideas, is antagonistic. I have reiterated this remark as, owing to its importance, I wish to emphasize it. There is always a danger in permitting such persons to have their liberty.

The paranoiac is often very clever at explaining the symptoms and various effects which he believes to be the product of unseen agencies acting on him. He will describe the various mechanisms in use by his enemies minutely, and may evolve marvellous theories as to "how it is done." No notion or idea seems incredible to him, no matter how bizarre it may be. He devotes his whole time to collecting evidence to support his grotesque fancies.

When "secret societies" are mentioned by the patient he may mean to inculcate the Government, the Ministry, the Protestant or Catholic churches, the Freemasons, and other bodies, as being the originators of his persecution.

These patients often seek to interview men in influential positions, governors, judges, members of Parliament, etc., with a view to laying the facts of their case before them, in the hope of obtaining redress, or of putting an end to their persecutions. They are very persistent in this matter, and take no heed of rebuffs. They are, very frequently, confirmed letter-writers, the subject matter being, of course, descriptive of their persecution, given at great length and with elaborate detail.

The memory of such patients is usually good, and wonderfully so on all matters bearing directly on their delusions; but with the ever-increasing insistence of their false ideas, the memory becomes warped, and limited to a narrow groove. Everyday happenings that impress the man-in-the-street make no appeal to the confirmed paranoiac; he makes no effort to memorize such things, he is too self-centred for that.

The reasoning power of the paranoiac, apart from his particular delusions, may, as I have already said, remain unimpaired for a long time, years even; and he may be able to conduct his business, and may be capable of making a valid will.

Another class of paranoia is that in which the victims develop delusions of an ambitious nature or of grandeur. He begins to think he is the cynosure of all eyes, and imagines he is some exalted personage, that he is co-equal with or superior to the Almighty, that he has to rule the world (the Kaiser, to wit. "Voices," or his consciousness, tell him that he has been chosen as the reformer of the

world's social plan, or that he is of royal descent, and that any persecution he thinks he is subjected to is the natural concomitant, he imagines, of his exalted rank and divine power. They mould their speech and conduct in consonance with their exalted position; they become patronizing and dictatorial, and take their place in the Sun. Such a one may propose marriage to a celebrity, and, being rebuffed, may commit murder. The woman who a few years ago claimed ex-President Taft as her husband, and went to his hotel armed with daggers and other weapons was palpably a paranoiac.

Some paranoiacs, with the help of unscrupulous solicitors, when there is money in the case, are for ever starting lawsuits, and prolonging them as long as possible. Such persons are termed litigious paranoiacs, and they are never content unless they have some legal dispute, dragging on month after month in the courts, to the annoyance of the unfortunate defendant and to the despair of the Bench.

Other paranoiacs are sexual perverts. They may dress as, and ape the manners of, women. In rare instances they entertain the delusion that they really are women, and seek the society of men equally perverted. Men arrested for masquerading as women are almost invariably paranoiacs, though their mental obliquity may not be apparent at a cursory examination. Many of these perverts are well-endowed intellectually, being poetical, emotional and æsthetic, as was Oscar Wilde, but they are so vacillating as to be incapable of earning their living. They exist entirely as parasites and are utterly unreliable. They lack self-control and are easily imposed upon.

The paranoiac and mattoid revel in spiritualism, theosophy, christian science, and other occult nonsense, and it is almost certain that the seers and mystics of history suffered, every one of them, from paranoia.

The older writers called this disorder monomania. If I may venture to offer a word of advice I would counsel you never to have anything to do with the certification of a paranoiac, if you can possibly avoid it; for should that paranoiac obtain his freedom he will make your life a burden, that is, assuming he permits you to live. The notes of the following case will serve, I hope, to illustrate some of the characteristics of a paranoiac suffering from delusions of persecution and jealousy:—A carpenter was first received into Kew Asylum in November, 1904, at the age of 47, on certificates in which it was stated that he had delusions of his wife's fidelity (they were actually delusions), that he was dangerous to his wife, and that he wanted to leave the State with his child.

After admission he was morbidly suspicious and declined to converse about the circumstances of his case, regarded himself as a much-injured man, and was emphatic that his committal and detention were illegal. As a fact they were not so.

In three weeks' time he was allowed on probation and was subsequently discharged.

Thereafter he agitated frequently in the law courts to have the date of his discharge made to

agree with the date of his committal to the asylum, thinking thereby to annul the record of his having been insane. These applications were finally refused by the Chief Justice, and from that time on the man regarded himself as "legally dead and without civic rights" (to use his own expression). He worked regularly at his trade and supported his child, but resolutely refused to pay any taxes. His sister, who kept house for him, was also, by contact with him, afflicted with persecutory delusions.

He endeavoured, without success, to obtain a divorce from his wife, charging her with adultery, and he created a scene in Court at the end of the trial by loudly accusing the Judge and his own counsel with conspiring together against him and of thus preventing him from obtaining what he sought.

He did not come prominently into notice again until the latter months of 1912 when, aided by a scheming sympathizer, he began to address public meetings, whereat he gave utterance to the persistent persecution he said he was subjected to at every turn.

He gathered round him a coterie of cranks and formed what he called the Lunacy Reform League.

He harassed lawyers innumerable, soliciting them to take up his case, and on one occasion is known to have threatened to shoot one of them who was indiscreetly unsympathetic.

As an outcome of the extravagant and wild statements he made at the public meetings concerning many public men and public officials, whom he regarded as all being in one huge conspiracy against him, he was arrested and tried as a lunatic. He stubbornly refused to speak to the two medical men called by the police to certify him, and he engaged four practitioners to certify to his sanity, two of whom declined when in court.

He was certified insane and was admitted to Kew Asylum for the second time in December, 1912, on the following evidence:—

(a) He said that he had never been discharged from Kew Asylum and that he was legally dead. This was shown to be false by the production of the Asylum records.

(b) He said the Chief Justice had personally falsified the Asylum records.

(c) He accused the Chief Justice of having committed adultery with his wife; and at public meetings he gave an account of several such acts of adultery, naming the reserve where the acts took place and added minute and salacious details as to the manner in which they were performed.

This accusation was denied on oath by the Chief Justice and the wife.

(d) He accused his wife of having eight years previously committed adultery with several men, this the wife also denied on oath. At the point of a revolver he had exacted a pseudo-confession from her. He also threw vitriol over her.

(e) He said he was the victim of a widespread conspiracy which included many prominent public men, the Premier, the Attorney-General, the Speaker (Sir F. Madden), the Chief Justice, the Lunacy De-

partment, the police, the justices and some citizens of the suburbs where he resided.

The man had a furtive, hunted expression. He was insanely suspicious and either gave evasive, non-committal answers or refused to reply at all when questioned by one who he thought was opposed to him.

Owing to the nature of his delusions and his distorted judgement he gave utterance to untruthful statements with reference to himself, his case and those whom he regarded as his persecutors. All paranoiacs pervert the truth.

After five or six weeks residence in the Asylum it was arranged that he should return to his native country, Denmark, and he was allowed to leave the Asylum daily in charge of a friend to make the necessary arrangements for his departure.

During these outings, it was subsequently ascertained, that he spent much of the time interviewing various medical men in order to obtain from them certificates as to his sanity, and he actually obtained three or four such certificates from reputable men, be it said.

One would imagine that the ordinary medical practitioner, if approached by a stranger with such an unusual request would view the matter with curiosity, if not suspicion, and either decline to give such a certificate or temporize with the patient until such time as he had made enquiries concerning the facts of the case.

Everything seemed to be in readiness for the patient's exodus from the State, but one day he failed to return to the Asylum from his parole and I have heard nothing about the man since.

Thus ends the second chapter in this man's eventful history, but I entertain feelings of apprehension as to what will happen in the third chapter, for there assuredly will be a further instalment of the story.

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#### INSANITIES, OTHER THAN GENERAL PARALYSIS OF THE INSANE AND TABO-PARESIS, POSSIBLY DUE TO UNDETECTED SYPHILIS.<sup>1</sup>

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Anyone who daily makes *post mortem* examinations of insane patients cannot fail to be struck by the frequency with which he is confronted by those changes in the viscera and blood vessels which are commonly ascribed to syphilis. The clinician who has had the patients under observation during life, and who has made careful but fruitless examination of patients and patients' relatives for a history of syphilitic infection, is considerably surprised at the *post mortem* findings. There are several reasons for this. First of all, quite apart from the instances in which the patient and his friends knowingly deceive the medical adviser, there are cases in which the patient and relatives deny any history of syphilis in honest ignorance of the true facts. The medical man has the serum subjected to the Wassermann test,

<sup>1</sup> Read at a meeting of the Victorian Branch of the British Medical Association on August 4, 1915.

and, receiving a negative result, dismisses syphilis at once as being quite foreign to the cause of the illness. I might say here that I am not attacking the efficiency of positive Wassermann reactions, but wish to draw your attention to the misleading influence of negative reactions in many cases. Forgotten infection, slight infection, so slight that it was overlooked and unrecognized, and congenital infection are the misleading factors on the one hand, and too much reliance on the ability of the Wassermann reaction to detect every grade of syphilis, together with the masking of symptoms by the patient's mental condition, and the overlooking of the fact that inherited syphilis does not necessarily give rise to stigmata when associated with brain disease, are responsible for the clinician's confusion. Many of these cases in which the patient acts in good faith in denying infection are instances of general paralysis of the insane, tabes or gummata of the subcutaneous tissue, and many are the cases of sane folk with congenital syphilis who are ignorant of their inheritance. These facts are generally recognized in the medical world, but what I wish to bring to your notice in the first place is the unreliability of the negative Wassermann finding, not the positive results remember, in syphilis associated with insanity.

When the first application of the Wassermann test was made to cases in the Victorian Lunacy Department I was very dissatisfied with the results it gave, and since then I have heard the results of the test challenged on many occasions. In going into the matter thoroughly I found that other investigators obtained similar anomalous results in other parts of the world. As the patients under my care had not received any antisiphilitic treatment I knew that the Wassermann test had not been employed to support the denial of syphilis at a time when a positive reaction was excluded. I was still thinking about this when I came across a paper by H. R. Dean, in the *Lancet* of July 23, 1910, in which it was stated that "The period during which a positive result may be obtained is known to be extremely variable in the case of the acquired form of the disease. In the congenital form it might be expected that the percentage of positive results would have a close relation to the age of the patient examined." A grouping of 330 cases according to age gave the following results. (The observations were carried out on idiots.)

(1) Patients of 10 years and under . . . . .	94. gave 20 positive = 21.27%
(2) Patients of 11-15 years . . . . .	142. gave 24 positive = 16.9%
(3) Patients of 16-20 years . . . . .	66. gave 4 positive = 6.06%
(4) Patients of 21-30 years . . . . .	24. gave 3 positive
(5) Patients of 31-44 years . . . . .	8. all negative

The above results show that the positive results diminish rapidly after the 16th year. They also showed a large number of undetected syphilis cases, since of the 51 patients giving positive Wassermann reactions only seven showed conclusive evidence of syphilis from a clinical standpoint. Linser examined a series of children of syphilitic parents, and found that two-thirds gave a positive reaction, while only one-third showed any other sign of infection. These two series of examinations sug-

gest that there is a certain proportion of syphilitics who, for some reason, do not give the positive Wassermann reaction. The examination of Linser just quoted overcomes the only objection I can see to Dean's statements. I thought at first glance that Dean's statement that after the 16th year the number of positive reactions decreased might mean that the decrease with the advance in years indicated that the idiots who owed their idiocy to syphilis died off at an early age, and that the idiocy of the survivors was due to some other cause. According to Linser, one-third of the children of syphilitic parents give a negative Wassermann reaction. The serum of twenty unselected patients at the Idiot Cottage, Kew, Victoria, was submitted to the Wassermann test, and nine positive, nine negative and two partial reactions were obtained. Of two children from the same Institution, brother and sister, one gave negative and the other a positive reaction. Can these results be reconciled with the experience of the *post mortem* room? It is not uncommon to meet with all the usually accepted manifestations of syphilis in subjects under the age of normal senile arterial degeneration. The patients were not regarded as syphilitic during life.

The most typical of juvenile general paralysis, clinically and *post mortem*, that I ever saw at the Idiot Cottage, Kew, had no stigmata of any kind. He had an unusually perfect set of teeth. We could obtain no history of syphilis. Mott says: "We know that infantilism and various forms of premature decay of the nervous system, which Fournier has termed "parasyphilitic," may arise in the children of syphilitic parents, and that the children may not show any gross lesion of a syphilitic nature," and he refers to Dr. Chislett's case in the *Archives of Neurology and Psychiatry* of a general paralytic father, whose serum gave a positive Wassermann reaction. His wife had not, as far as she was aware, had symptoms of primary or secondary syphilis, but eight years after marriage she had a tertiary ulcer of the left leg. She had borne ten children, two prematurely; two of the children died in infancy. The history of the remaining six is interesting:—

- (1) Eldest boy, aged 16 years: Very nervous, and stupid at school. The Wassermann reaction was positive; he shows no sign of syphilis.
- (2) Girl, aged 12 years: Deaf in one ear, otherwise normal; the Wassermann reaction was positive.
- (3) Girl, aged 10 years: The Wassermann reaction was negative.
- (4) Boy, aged 8 years: Rhinitis and conjunctivitis; the Wassermann reaction was positive.

The fifth and sixth children yielded negative results to the Wassermann test.

All these instances I have quoted suggest to my mind that there is a certain percentage of individuals in the community who are unrecognized syphilitics.

There are certain types of insanity as well as many individual cases of insanity which show syphilitic changes *post mortem*. These types are dementia præcox, epilepsy and idiocy. Now these



types of insanity are, practically speaking, insanities of youth, and we can thus exclude senile changes in the pathological findings. The *post mortem* findings in a series of 22 cases of dementia præcox are very suggestive:—

Atheroma of arch of aorta .. .. .	9
Atheroma of abdominal aorta .. .. .	3
Sclerosis of heart valves .. .. .	9
Myocardial changes .. .. .	10
Thickening of spleen capsule .. .. .	2
Fibrotic liver .. .. .	10
Marbling of liver capsule .. .. .	5
Fibrotic kidneys .. .. .	20
Thickening of calvarium .. .. .	7
Thickening of <i>dura mater</i> .. .. .	7

Among 35 cases of epilepsy examined the following lesions were found:—

Atheroma of aortic arch .. .. .	14
Fibrotic liver .. .. .	12
Fibrotic kidneys .. .. .	28
Thickening of calvarium .. .. .	19
Thickening of <i>dura mater</i> .. .. .	13
Thickening of <i>pia mater</i> .. .. .	13

The changes met with in 54 cases of idiocy include:

Sclerosis of valves .. .. .	27
Fibrotic liver .. .. .	29
Fibrotic kidneys .. .. .	43
Thickening of <i>dura mater</i> .. .. .	27
Extreme abnormality of brain pattern .. .. .	21

These sclerotic changes and atheromatous degenerations in the young are considered by most authorities to be syphilitic. The question that arises is: Are these types of insanities the results of syphilis, and the patients themselves whom the Wassermann test and physical examination do not label as such, unrecognized syphilitics? Gummatous formation is not met with in these patients, but it must be remembered that it is not met with in general paralysis or tabo-paresis. You will notice the peculiar absence of gross changes in the basal vessels of the brain in these cases. This characteristic is also present in general paralysis of the insane. If you examine cases of general paralysis of the insane you will find the same absence in spite of the atheromatous changes being so common in the arch and abdominal aorta. In nearly all the cases of general paralysis syphilitic aortitis was met with, whilst the basal vessels were affected in only 37 out of 139 patients of all ages include some nearer 60 than 50 years of age. I want to draw your attention to this evidence, which suggests that syphilis is more frequently responsible for the patients in our hospitals for insane than the text books lead us to believe. I know that the medical profession recognizes syphilis as the cause of general paralysis of the insane and tabo-paresis, and to a certain extent of idiocy, but I cannot recall hearing it suggested that other insanities are due to the same cause. In insanity we all recognize there must be a predisposing cause, heredity and an exciting cause, in order to determine a mental breakdown. The common cause of the attack usually ascribed is worry and overwork, and this seems to be uppermost in the mind of the certifying practitioner, whilst the factor which is responsible for creating the vulnerability of the neurone to that particular stress (overwork or shock, or whatever else it may be) is quite overlooked. It may be a rather bold statement to make,

but until I have evidence to the contrary I will hold the opinion that in many cases heredity is only another name for syphilis. I base this belief upon the *post mortem* findings of about 700 cases. I believe that if we could only obtain a history of the ancestors we would find that the *post mortem* findings of to-day in these cases is the result of the syphilis that was present in the body of the father, grandfather, and even great grandfather of the deceased. In making a hereditary chart it is comparatively rare to obtain information concerning a grandparent, and practically impossible in a young country like this to get reliable information concerning a great grandparent. In looking through the charts at my disposal I can find only one record with a great grandfather's history, and curiously enough this is a case of epilepsy, from which the great grandfather himself suffered, and transmitted to his grandson and great grandson. The English authorities question the transmission of syphilis to the third generation, although Fournier and the French syphilographers appear to acknowledge it. Surely if epilepsy can be transmitted through four generations, as in the case just mentioned, the same must apply to syphilis, which is such a powerful agent of fibrosis. Mott hinted long ago that eventually idiopathic epilepsy would prove to be parasymphilitic. If this is the case, then the case of epilepsy just mentioned shows that syphilis can produce its ill-effects through many generations. It might be asked why there are not more insanities, syphilis being so common, if these insanities are due to syphilis. One might as well ask the same question concerning general paralysis of the insane and tabo-paresis.

Another item of interest is that primary and secondary syphilis are rarely met with in persons recently admitted to the hospitals for insane. It is well known that those already syphilitic do not contract fresh syphilis, and this is how I explain away the absence of primary or secondary syphilis in the recently admitted patients at Kew and Yarra Bend, in spite of the fact that they have contained about 2000 beds for the last seven years. Mott and Sir Jonathan Hutchinson have acknowledged that congenital syphilitics occasionally acquire syphilis in later life. I know of one patient at Kew who developed a chancre from his mistress one visiting day many years ago. His case was one of persecutory delusions, but there is no evidence in the books to suggest whether he was already syphilitic or not on admission.

There are many cases of insanity in persons who have had gummata causing the insanity, but the patient referred to is the only one I have heard of in our institutions, where there has been a primary or secondary manifestation. It appears to me as if the general rule that those tainted with syphilis possess an immunity against infection applies, with occasional exceptions, to the insane population of our hospitals for the insane. Although general paralytics do not as a rule show any manifestations of syphilis during life prior to the onset of the general paralysis, yet we accepted general paralysis of the insane as syphilitic long before the Wassermann test and Noguchi's discovery of the spirochetes in the brain

proved it to be so. Why should we hesitate, in the presence of these pathological changes indicating congenital syphilis, to regard dementia præcox and other conditions as being syphilitic in origin? To give an idea of how largely syphilitic findings figure in the *post mortem* examinations of the insane, I quote from the report for 1914 on the pathological work in the Victorian Lunacy Department: "Taking the last 100 *post mortems* at Kew, I find that the Wassermann test was applied in 20 cases, and in 16 instances was positive. In 56 of the 100 cases examined *post mortem* there were indications of syphilis, and of the 44 remaining the majority were senile, and findings which would suggest syphilis in the younger individual were allowed unchallenged on the score of senile changes. The findings of chronic fibrosis and arterial degenerations in the young subjects appear with great frequency in the *post mortem* records, which would take up too much time to mention here."

In the census of the United States of America for the year 1910 it is stated that 12.9% of the deaths amongst the insane were due to general paralysis of the insane (and this does not include deaths from any other condition) caused by syphilis.

Of 1200 cases at the Johns Hopkins Hospital positive reactions to the Wassermann test were obtained from the serum in aortic insufficiency in 50%; in aneurysm in 95%; in tabes dorsalis in 64%; and in general paralysis of the insane in 92%. This leaves a large percentage of tabes cases in which the Wassermann reaction fails to reveal syphilis. The same conditions which baffle the causal diagnosis in tabes may be present in many other conditions. In *The Journal of Cutaneous Diseases* (1913, p. 393), Foerster reports several cases of untreated tertiary syphilis of the skin and mucous membranes, in which the Wassermann reaction was negative. Although I have grouped idiocy with insanity, I have not lost sight of the fact that the former depends on an architectural defect of the skull and contents, and Mott's latest investigations clear up one or two points that have caused much discussion. Mott's investigations show that only 2.1% of insane parents have mentally defective children, and only 1.4% of the children of insane parents are mentally defective. This shows that a considerable percentage of these children owe their mental deficiency not to a germinal hereditary defect, but to congenital pre-natal or post-natal causes. The cause which appears to me to be the most likely in this land of ours, where squalor, want and privations to body and soul are practically unknown, is syphilis. I think this will explain why the Mendelian law, when applied to insanity, is found impracticable, as we are not dealing with different types of the same race, but with a special organism, the spirochaeta.

I have not come across evidence of thyroid atrophy in the cases I have examined after death, and I have always looked for it. This does not apply to cretinism. Yet it is significant that the only drug which has given results of any note in the treatment of insanity, especially dementia præcox and idiocy, except sedatives and aperients, is the thyroid ex-

tract. This owes its action to iodothyron, an iodine compound (nearly 10% iodine). In order to obtain a satisfactory result, the drug has to be pushed beyond the dosage ordinarily employed. The routine is to put the patient to bed, and to increase the dose of the drug until the temperature begins to be raised. The results are supposed to be due to the reaction produced, but it is not improbable that the 10% of iodine may be the curative agent owing to its peculiar combination, and it may act as potassium iodide does in cases of tertiary syphilis.

There are many notable men of history who have been insane, and there are individuals known to us, either as friends or relatives, who have become insane, and whose condition we would be loath to regard as the result of syphilis, either through their own or their parents' fault. This makes the subject difficult to judge, but looked at dispassionately we must either make up our minds to accept the doctrine that in a large percentage the patients are syphilitic, or else to change our ideas concerning the significance of those generally accepted signs of syphilis, such as atheroma in the young, fibrosis of the spleen, kidney and liver, milk patches on the epicardium, etc. The evidence I have submitted in favour of undetected syphilis being a factor in the production of insanity is:—

- (1) The great frequency of syphilitic *post mortem* findings in the insane; and
- (2) The freedom of the insane from primary and secondary manifestations of syphilis; and the reasons why the cases are not detected during life are:
  - (1) The Wassermann reaction does not reveal syphilis in all cases in which it is present. A certain type of known syphilitic disease exists, which yields a low percentage of positive reactions, *e.g.*, tabes.
  - (2) It is possible for individuals to be syphilitic without showing any sign of the disease.
  - (3) The clinical symptoms may be masked by the mental state.
  - (4) The inability to obtain correct heredity charts in many cases.

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#### THE FLUID REACTIONS—THEIR VALUE, DIAGNOSTIC AND PROGNOSTIC, IN PSYCHIATRY.<sup>1</sup>

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Although I originally proposed to consider more than the four reactions discussed in this paper, time compels me to limit myself to them, namely, the Wassermann reactions of the serum and cerebro-spinal fluid, the globulin reaction and pleocytosis of the fluid.

Corning first performed lumbar puncture to obtain cerebro-spinal fluid in 1885, but it is usually associated with the name of Quinke, who, in 1891, took up the study with such thoroughness that he may be said to have introduced it and led to the great interest taken now in it. Its application to psychiatry is associated with the names of Sicard,

<sup>1</sup> Read at the meeting of the Victorian Branch of the British Medical Association, on August 4, 1915.

Ravant, Plaut and Nonne. The study of the Wassermann reaction in the serum and cerebro-spinal fluid, of the cellular changes and of the increase of globulin in the fluid is widely used at the present time in the differentiation of syphilitic and non-syphilitic diseases of the nervous system. From this study we obtain information enabling us not only to form a diagnosis, but also to gauge the effects of treatment, to make a prognosis, and to determine the transition of one form of lues of the nervous system into another. It must be taken in conjunction with the clinical features of the case. The Wassermann reaction has been determined for us by Dr. Bull.

For the globulin test I recommend Kaplan's method, which gives a fairly accurate gauge regarding the degree of excess. The other methods are the Phase I. of Nonne-Apelt, and Noguchi's method.

*Nonne-Apelt.*—2 c.cm. of cerebro-spinal fluid are mixed with an equal quantity of neutral saturated solution of ammonium sulphate, and compared after 3 minutes with another tube containing cerebro-spinal fluid only. If there is definite opalescence or turbidity the reaction is considered positive.

*Noguchi's Method.*—To .1 c.cm. of cerebro-spinal fluid add 0.5 c.cm. of 10% butyric acid in normal saline solution; boil briefly and add an amount of normal sodium hydroxide solution equal to that of the cerebro-spinal fluid used. Boil again for a few seconds. A granular or floccular precipitate indicates a protein excess.

*Kaplan's Method.*—In a small test tube place 0.5 c.cm. of cerebro-spinal fluid, heat until it boils up twice; then add three drops of 5% butyric acid in normal saline, followed at once by 0.5 c.cm. of super-saturated ammonium sulphate solution; allow it to flow under the solution, and not to mix with it; set aside for 20 minutes. An excess is indicated by a thick granular ring. Now take four other tubes, add to each 0.1, 0.2, 0.3, 0.4 c.cm. of cerebro-spinal fluid, and make up to 0.5 c.cm. with distilled water. Do as above, and set aside for 20 minutes. If a ring has appeared in the 0.1 tube then we call it a 0.1° excess, and this represents the greatest degree of excess.

*Cylogy.*—The cells are examined (1) by centrifuging and staining, (2) by counting in a Fuchs-Rosenthal or other chamber. The maximum normal count may be placed at about 8 cells per c.mm. An increase in the lymphocytes signifies meningeal irritation, and their number varies with its degree. It is found in all meningitides, and in the syphilitic processes, such as tabes, cerebro-spinal lues, and general paralysis of the insane. What are known as plasma cells are regarded as highly characteristic of general paralysis of the insane by Alzheimer, but I have met with a number of cases where they were absent. The polymorphonuclear leucocyte is found in the fluid in all acute cases of meningitis, whether tubercular, septic, or in cerebro-spinal meningitis. The origin of the cells is probably both hæmatogenic and histogenic. Plaut's observation that the fluid obtained at higher levels corresponds exactly with that obtained from lower levels is significant.

Before considering the differential diagnosis, let me consider the serology of general paralysis. There is no cut and dried formula, and this is, I think, very important to grasp. The usual formula is: Serum: Wassermann reaction +; Fluid: Wassermann reaction, +; globulin, excess; pleocytosis, 17—50. But the formula varies with the stage of the disease, and in this connection the French school enunciated the

following conception of the serologic progression in general paralysis:—

	Incipient	Fully	
	Stage.	Developed.	Decline.
Serum: Wassermann reaction	Positive.	Positive.	Negative.
Fluid: Wassermann reaction	Negative.	Positive.	Positive.

This scheme is defective in so far as the globulin and cell counts are not considered. Kaplan has completed it, and gives the following:—

	Incipient	Fully	
	Stage.	Developed.	Decline.
Serum, W.R. . .	Positive.	Positive.	Negative.
Fluid, W.R. . .	Negative.	Positive.	Positive.
Globulin. . .	Excess or not.	Excess.	Frequently normal.
Pleocytosis . .	More than 60.	60 or less.	Less than 40.

The significance of this is not always grasped, since it is usual to have the serum only tested, and if a negative result be obtained in a case that is definitely parietic from a clinical point of view, the test is regarded as unreliable. The fact is that 100% of positive Wassermann reactions are never found in cases verified as paresis at autopsy. Dr. Lind made autopsies on 68 patients with general paralysis of the insane, whose serum had been submitted to Dr. Bull. The results were:—

58 positive } i.e., 92.6% gave positive or partial reac-  
5 partial } tions—the reaction in G.P.I. being  
5 negative } usually strongly positive.

I will now present the serological findings in a few of my cases:—

- (1) Fully developed general paralysis of the insane in a male, aged 39 years. Serum: Wassermann reaction +; cerebro-spinal fluid, Wassermann reaction, +; globulin, 0.3°; pleocytosis, 100 excess (Kaplan).
- (2) Early case of general paralysis of the insane (verified at autopsy), in a male, aged 37 years. Serum: Wassermann reaction +; cerebro-spinal fluid, Wassermann reaction, —; globulin, 0.4°; marked pleocytosis, with 7% mast cells.
- (3) Advanced case, unable to stand or articulate; male, aged 45 years. Serum: Wassermann reaction, —; cerebro-spinal fluid, Wassermann reaction, partial; globulin, 0.5°; pleocytosis, 26 excess.

In 261 cases of general paralysis of the insane, Kaplan got the following results:—

Serum: Wassermann reaction, positive 90%.  
Fluid: Wassermann reaction, 75.3%.  
Globulin, excess, 83%.  
Pleocytosis, 17.83 %, very rarely over 100; 96.2%.

In 195 autopsies, Chandler and Mann obtained in the cerebro-spinal fluid 97.9% positive Wassermann reaction.

Now some cases regarded as idiocy are found to give the serologic changes characteristic of paresis, and these we know are cases of infantile general paralysis. Dr. Lind, a year or two ago, recorded the details of an autopsy on the body of a child who had been regarded as an idiot. Had rachicentesis been carried out, the diagnosis would have been made during life. This is important, for it may be possible by strenuous antispecific treatment to arrest the process, or even bring about a remission. We had a result of this nature in an adult at the Mental Hospital.

Traumatic psychosis is sometimes difficult to differentiate from general paresis. The prognosis is



very different in the two cases. In traumatic psychosis the serology is usually negative, but if there has been antecedent syphilis the serum may give a positive Wassermann reaction, and occasionally there may be a border-line pleocytosis in the cerebro-spinal fluid. Where the latter occurs, then the diagnosis can only be made after watching the clinical developments, and by the results of subsequent serological examination. The Korsakoff or polyneuritic psychosis is at times difficult to distinguish from paresis, as is also the pseudo-paresis alcoholica. In both the serology is usually negative, and the cerebro-spinal fluid always so.

Cases of manic-depressive insanity often present difficulty. A case of mania with exaltation, antecedent syphilis, and a positive serum Wassermann reaction may suggest early paresis; the reaction in the cerebro-spinal fluid, however, is negative. Again, cases of melancholia may cause difficulty. Such a case was admitted to the Receiving House. The patient was depressed, suffered from delusions of a hypochondriacal kind, and refused food. There was a history of gonorrhœa. The diagnosis was melancholia. Subsequently I obtained the serological results, which at once revealed the parietic nature of the disorder:—

H., male, 40 years; Wassermann reaction: serum, +; cerebro-spinal fluid, +; pleocytosis; positive Noguchi.

The diagnosis of general paralysis of the insane was confirmed at the autopsy.

In a case of acute delirium I obtained the following results:—

Male, 37: Serum, Wassermann reaction not tested; cerebro-spinal fluid, Wassermann reaction —; no globulin excess; no pleocytosis.

The following case presented some general symptoms of a gross intracranial tumour, but the diagnosis of paresis was suggested, as was also melancholia. The serology cleared up the doubt, and enabled a diagnosis of intracranial tumour to be made:—

G. female, 45 years: Serum, Wassermann reaction —; cerebro-spinal fluid, Wassermann reaction —; no pleocytosis; no globulin excess.

In cerebro-spinal lues, according to Kaplan, the serology shows the following features:—

Serum: Wassermann reaction, positive in 88.7%; cerebro-spinal fluid, positive in 32.7%; globulin, excess in 50.3%; pleocytosis, present in 96.7%, usually more than 100, and may go up to 1700 cells.

Fehling's solution may not be reduced where there is an active exudative process, which is associated with the presence of polymorphonuclear cells in the cerebro-spinal fluid. In the parasyphilitic processes the cells are usually lymphocytes. The cells mean meningeal irritation and therefore in endarteritic forms and deeply-seated gummata there will be no cellular excess.

The following case was diagnosed as general paralysis of the insane, but the autopsy showed a cerebral gumma:—

Female, aged 48 years: Serum, Wassermann reaction +; cerebro-spinal fluid, Wassermann re-

action —; globulin, —; border-line cell count.

Thus, a case that should have had vigorous treatment probably got none at all. The serology was sufficient to render the diagnosis doubtful.

Paresis may develop in a case of *tabes dorsalis*, tabo paresis, or a non-parietic psychosis may appear. The typical serological formula of tabes is:—Serum, Wassermann reaction +; cerebro-spinal fluid, Wassermann reaction, —; globulin, normal; pleocytosis, 25-95.

In 425 cases of tabes Kaplan obtained the following results:—

Serum: Wassermann reaction, + 68%; cerebro-spinal fluid, + 21%; globulin, excess 30%; pleocytosis, 25-95 in 90%.

In 7% of tabes and 3.8% of paresis an entirely negative serology was obtained. Contrast with the above formula that for paresis:—

Serum, Wassermann reaction +; cerebro-spinal fluid, Wassermann reaction +; globulin excess; pleocytosis, 17-50.

I shall refer to this again under prognosis.

#### Prognosis.

Nonne has shown that a study of the four reactions may enable a prognosis to be formed in cases presenting an Argyll-Robertson pupil of specific origin as the only neurological sign. The four reactions may be negative, thus indicating a localized syphilitic process in the nervous system. By appropriate treatment improvement or recovery in the ocular signs may occur, and the reactions may be transformed from positive to negative. If treatment does not affect the reactions, then we may expect the development of tabes or paresis.

Under rigorous antispecific treatment the reactions tend to become normal in a definite order. The cells are first affected, then the globulin, and lastly the Wassermann reaction in the serum and in the cerebro-spinal fluid.

In two cases of tabes that subsequently developed parietic signs, it was found that the Wassermann reaction in the serum could not be affected by treatment, even before any signs of paresis appeared. Probably in this "Wassermann-fast" type we may be able to predict the probable development in a case of tabes of the parietic histological changes, the histology of which has been so thoroughly worked out by Alzheimer. Similarly, in the transition from cerebro-spinal syphilis into paresis, the effect of treatment will decide the issue. In the latter it is difficult, or impossible, to reduce the cellular increase to normal; the globulin excess persists, and the complement fixation test applied to the serum or the cerebro-spinal fluid, or to both, remains unaltered. In a case of paresis at the R.H., after injection of salvarsan the blood gave negative Wassermann reaction, but the cerebro-spinal fluid still gave a feeble positive reaction, and revealed a lymphocytosis. This case cleared up somewhat as a result of the treatment. Another patient was given salvarsan, but the reactions all remained positive, and he went rapidly downhill. A case of cerebro-spinal lues was treated vigorously, and improved greatly; the Was-

sermann reaction in the serum changed to negative, the cell count of the fluid became borderline, and the globulin negative. The Wassermann reaction of the cerebro-spinal fluid was negative throughout. I believe that the first signs of syphilis of the nervous system occur in the serum and cerebro-spinal fluid, even before the clinical features manifest themselves. Thus, in the study of the serology alone, in cases of syphilis can we determine whether a given case will develop lues of the brain or not. Dreyfus showed that in 17 out of 22 cases of secondary syphilis the cerebro-spinal fluid was abnormal, although no symptoms of nervous involvement could be detected. Vigorous treatment is necessary, and this should be controlled by periodical investigation of the serology. By this means much more can be done for early cases of paresis. In fully developed cases, with destruction of the nerve cells and glial overgrowth, the most that can be expected is arrest of the process.

### Naval and Military News.

The medical profession has sustained a very severe loss in the death of Captain Keith Levi, of Perth, of Major S. J. Richards, of Mount Morgan, Queensland, and of Colonel Manders, Assistant-Director of Medical Services of the New Zealand and Australian Division of the Royal Army Medical Corps.

Captain Keith M. Levi was killed in action at the Dardanelles on August 7, 1915. He was attached to the Light Horse in February last, and served at the First Australian General Hospital at Heliopolis. After working on transports between Alexandria and the Dardanelles, he became attached to the 29th Division of the Hampshire Regiment, and took up his regimental duties on July 29. We propose to publish an account of his career in a subsequent issue.

Major S. J. Richards died of illness contracted while on active service with the First Australian Clearing Hospital.

We learn that the number of cases of cerebro-spinal meningitis in the various Australasian Military Camps has increased not inconsiderably during the past fortnight. In Melbourne, the Alfred Hospital is being utilized exclusively by the military authorities for these cases. About 40 patients are under treatment. Several cases have occurred at the Garrison Hospital, Paddington (New South Wales), and there have been 9 cases at the Liverpool Camp. The officers of the Microbiological Bureau of Sydney have undertaken the bacteriological examination of these cases. In one or two cases Weichselbaum's meningo-coccus was not found in the cerebro-spinal fluid, possibly because the organism had not invaded the lumbar region at the time the puncture was carried out. In other cases the typical micro-organism, giving all the bacteriological characteristics, was found.

We have been informed that 78% of the troopers on leave from the New Zealand Camps are carrying the meningo-coccus in their naso-pharynxes.

### THE THIRD AUSTRALIAN GENERAL HOSPITAL.

The Third Australian General Hospital, which left Australia on May 19, 1915, arrived at Plymouth on June 27, 1915, and received orders to equip, and after 10 to 14 days to sail for Etaples, on the Canche River, between Boulogne and Montreuil. During the first week in July, this order was recalled, and the Hospital was ordered to proceed to Lemnos, an island in the Aegean Sea, some 45 miles southwest of the Dardanelles. In spite of the fact that this change involved a complete revision of equipment, the Hospital was ready for embarkation within a few days, and

sailed from Southampton during the second week of July. Before leaving, the Director-General of Medical Services, Sir Alfred Keogh, and the Officers of the R.A.M.C., entertained Colonel Fiaschi, the Officer-in-Command, and the Lieutenant-Colonels attached to the Third Australian General Hospital, as well as the senior Officers of the American Hospital, organized by Sir William Osler. Among those present at the dinner were Sir Ronald Ross, Sir William Osler, Sir David Bruce, and Sir William Arbuthnot Lane. The Australian guests were Colonel Fiaschi, Sir Alexander McCormick, Lieutenant-Colonel Dick, Lieutenant-Colonel S. Jamieson, Lieutenant-Colonel Stawell, Lieutenant Colonel de Crespigny and Lieutenant-Colonel Cudmore. It is stated that this was the first occasion since the commencement of the war on which a dinner has been given by the Royal Army Medical College.

Considerable comment has been made on the overlapping of the Australian Red Cross Society's organization, and that of the Defence Department. A suggestion has been made that a Central Committee, with representatives from the Department and from the Red Cross Society, should be set up for the purpose of dealing with the provision of material required in the treatment of wounded and sick soldiers. As we have pointed out on many occasions, the Department of Defence has listed all articles necessary for soldiers in hospital. It has been stated by the Director-General of Medical Services that in addition to ordinary equipment, sleeping jackets, sheets, slippers, clothes, shirts, brushes and combs and numerous other articles had been furnished to the various military hospitals. A large supply had been sent out, and large contracts to supply various goods were now being carried out. The Red Cross Society had come to the assistance of the Department in times of emergency. There had been times when no further equipment had been available at the Department, and the Red Cross Society had supplied the deficiency. The Red Cross stores were thus a great help, and the Department had been glad to avail itself of them when large quantities of equipment were not available for immediate use.

### APPOINTMENTS.

Army Medical Corps.

To be Captains—

Gladstone Montague Hunt and Reginald MacDougall Bowman.

### STRYCHNINE MISTAKEN FOR QUININE.

Dr. W. C. Petherbridge was charged, before Judge Fitzhardinge, at the Newcastle Quarter Sessions, on August 10, 1915, with manslaughter. It appears that on June 23, 1915, a woman named Annie Agnes Page sought medical advice from Dr. Petherbridge, and received from him a bottle of medicine. Dr. Petherbridge intended to prescribe quinine hydrochloride. Mrs. Page took a dose of the medicine on returning home, and died after exhibiting symptoms of acute strychnine poisoning. On learning of her death, Dr. Petherbridge examined his dispensary, which was in the process of removal from one room to another, and discovered that a mistake had been made in confusing the bottle containing strychnine with that containing quinine. He immediately communicated with the Government Medical Officer, and explained what had taken place. In discharging the jury, his Honour pointed out that no jury could impose more than a nominal penalty under the circumstances. He preferred to withdraw the case from the jury, which amounted to an acquittal of the accused. The mistake which he had made was not a criminal one.

It is announced that Dr. G. F. Read, some time assistant to the late Dr. Macfarlane at the New Norfolk Mental Hospital, Tasmania, has been appointed temporary Superintendent of the Institution, pending the appointment of a permanent officer. The Chief Secretary visited the institution on August 9, 1915, for the purpose of satisfying himself that the arrangements by which the employees at the hospital were brought within the scope of the Public Service Board were working satisfactorily.

## The Medical Journal of Australia.

SATURDAY, AUGUST 21, 1915.

### The Teaching of Psychiatry.

The series of four articles appearing in the present issue illuminates various aspects of psychiatric practice in a singularly lucid manner. Important and interesting as these articles are, it will be noted that the discussion which they stimulated within the meeting of the Victorian Branch was limited to two or three speakers. This fact is significant, since discussions held at the Victorian Branch are usually debates of considerable excellence. The reason why the subjects presented to the Branch meeting on this occasion failed to draw criticism but found in the members willing listeners is not far to seek. The teaching of psychiatry in our universities and clinics differs completely from that of other branches of medicine. In the olden days, students were required to obtain experience in three subjects outside the medical school and its hospitals clinics. These were infective fevers, insanity and vaccination. The average freshly qualified practitioner in the latter part of last century gained some superficial knowledge of the appearances of the common types of the exanthemata, and was capable of diagnosing well-marked cases of scarlatina, morbilli and possibly variola. But since he had not had charge of a single case of these diseases and had only been allowed to look on from afar as it were, the practical knowledge of these diseases, so essential to the family doctor, had to be acquired in the course of locum tenens work or in his own practice, at the possible expense of a small number of patients.

The same applied in regard to psychiatry, save that the recognition of the various forms of insanity was still more hazy and nebulous, and the knowledge acquired almost entirely theoretical. As a result, the errors in diagnosis, both in cases of infective processes and of disturbances of the mental state, were notoriously frequent and crass. In connexion with vaccination, the student was permitted to see this little operation performed, but not to perform it himself. Fortunately for the community, the average man possesses sufficient manual dex-

terity to admit of the learning of practical vaccination without much sacrifice.

Dr. Ernest Jones, the Inspector-General of the Insane of the State of Victoria, has pleaded for the institution of psychiatric clinics in connexion with the Melbourne hospitals. In the interest of the public, and for the better scientific and practical training of the medical student, we have already called attention to the advisability of this. Daily contact with selected cases of insanity, and well-directed observations, guided by capable teachers, are the only basis for a thorough understanding of one of the most complex and mysterious forms of disease.

The advantage to the public is obvious. If the average medical practitioner becomes capable of recognizing the different forms of insanity, of forming an intelligent opinion of obscure mental conditions, such as those met with in paranoiacs, and of differentiating between mental symptoms of general diseases and the essential symptoms of the psychoses, the danger of the certification of sane persons or of the refusal to certify insane persons would become reduced to a minimum. There is still a further advantage associated with a well-ordered psychiatric clinic. The alienist chooses early cases for teaching purposes. In this way, the patients who are amenable to treatment are placed in hospitals without the restraint necessary when a large number of insane patients are congregated together, and the prognosis in the individual case is improved not inconsiderably.

### THE SEAMEN'S HOSPITAL.

Thirteen thousand miles away, to the east of the great metropolis of London, there is an unpretentious-looking hospital, which has earned a well-deserved reputation among seafaring men. The doors of this plain building are never closed to the men of our merchant service, or to the sailors of our Imperial Navy. The managers of this institution are ever solicitous for the comfort and well-being of the sailor patients who seek treatment in its hospitable wards, and the medical and surgical staff are unremitting in their endeavours to give these sick men the benefit of the most modern treatment emanating from the scientific knowledge of diseases of tropical and moderate climates. Those who are



responsible for the conduct of the Seamen's Hospital at Greenwich have looked with much concern at the task to be fulfilled and at the rapidly-emptying coffers, which must supply the means to carry on the work. In the issue of the *Mercury* (Hobart), of August 13, 1915, a letter, signed by Lord Devonport, the Chairman of the Port of London Authority, appears. In the letter, his lordship points out that no seafaring man is ever refused admission to the hospitals, and proceeds to emphasize a fact which characterizes our great Empire. No matter what risks the sailor is called upon to meet, he is not deterred from keeping the Red Ensign and the White Ensign flying proudly at the masthead, a signal to the whole world that Britain rules the seas. He finds that the efforts of the Hospital to meet the expanding demands on its space and skilled staff are much restricted at this all-important juncture by a lack of funds. No less a sum than £30,000 is needed to provide for the sick seamen of the merchant navy. A large sum, as Lord Devonport points out, but surely not too large for those who depend on the ceaseless toiling of our brave sailors. The Seamen's Hospital belongs as much to Australia as it does to any other part of the Empire, and for this reason, we venture to bring to the notice of the citizens of the Commonwealth the plain fact that this excellent institution is anxious to tend to sailors from Australia, but is in danger of failing from want of means. A fund has been started, and the Chairman of this Fund is Lord Devonport, who appeals for contributions, which may be addressed to him at 41 Grosvenor Place, London. The appeal is not made to the United Kingdom, but to the united British Empire.

#### THE VALUE OF PROTEINS OF THE CEREAL GRAINS AND OF MILK FOR GROWTH.

During recent years much attention has been paid to the accumulation of quantitative data, showing the relative amount of the amino-acids, yielded by different proteins after hydrolysis. The enthusiasm in this work is the result of the belief, now widely accepted, that the similarity, with respect to their yields of amino-acids, in the composition of the food proteins and those of the body which they are to replace or form anew, determines the relative values of the individual proteins as animal foods. It has, however, been very difficult to produce definite experimental proof that comparable differences in the nutritive values of the individual proteins also exist.

This involves the attainment of growth by young animals fed on rations made up of purified food-stuffs. Investigations have now established the facts that certain individual proteins, from both animal and vegetable sources, are capable of supplying everything necessary in the way of nitrogen-containing complexes for prolonged growth; that other proteins, as gliadin of wheat, suffice for maintenance, but not for growth; while still others, as gelatine or zein, can serve only in part to replace the nitrogen lost through endogenous metabolism, and are incapable, when fed singly, of inducing growth in young animals. Practical dietetics and animal production must, however, deal with certain groups of proteins as they are found in the naturally occurring foods.

E. V. McCollum<sup>1</sup> reports a series of experiments which have been in progress during the last four years, to obtain quantitative data on the relative value of the mixtures of proteins occurring in natural foods. A definite answer cannot be, at present, given to the question whether a mixture of protein-cleavage products is as well suited for quantitative re-arrangement into the specific body proteins of one species of animal as into those of another. The anaphylactic and precipitin reactions give definite evidence that the tissue proteins of one species are foreign proteins to another species, but we know nothing of the nature of these differences whether they involve appreciable differences in the percentages of the various amino-acids, or rest in a different mode of arrangements of these complexes. A question of fundamental importance in a study of this kind, where it is sought to find the maximum possible efficiency with which an animal can transform the protein of a given food into body protein during growth, is the selection of that species which has the greatest capacity to grow. In the child the impetus of growth is low, the initial weight at birth being multiplied by three during the first year of life. A rat at birth weighs on an average 4.8 gms., and contains 0.064 gm. of nitrogen. The nitrogen content of a rat weighing 280 gms. is 8.5 gms. During the 280 days, which is the normal growing period of a rat, the animal multiplies its initial content of nitrogen by 133. A new-born pig of 2 lbs. weight contains 134 gms. of dry matter, and 11.9 gms. of nitrogen; 280 days with a good diet it will weigh 300 lbs. The nitrogen content of a hog of this size is at least 2,407 gms. This indicates a multiplication of the initial nitrogen content by 202. It is evident that the impetus of growth is greater in the pig than in the rat.

Another question which arises in the study of this problem is the effect of the plane of protein ingestion on the rate of retention of nitrogen. The experience of animal husbandry has established the fact that young animals do not grow well on a low protein diet, and the practice of feeding rations containing from 20% to 25% of protein to young pigs and calves is regularly taught in agricultural science.

In these experiments young pigs have been fed with starch, agar, and water until the faeces were

<sup>1</sup> Jour. of Biological Chemistry, XIX., pp. 323, November, 1914.

free from the grain with which the animal had been previously fed. A period of ten days with the quantitative collection of the faeces and urine has then followed on the starch diet. The nitrogen of the faeces and the total nitrogen and creatinine in the urine have been determined. The diet has then been changed from starch to the grain in question, with or without the addition of starch. Feeding with grain has been continued for a period of 40 to 60 days, when the ration has been again changed to starch, agar, and water for a period of 10 days. In order to have a standard for the amount of protein introduced into the diet it has been assumed that the endogenous upkeep of the pig required 5.5 times the nitrogen eliminated daily as creatinine. The results of these experiments show that, with moderately low protein ingestion (6.6 to 10%), the rate of nitrogen retention is influenced by the amount of protein in proportion to the tissues of the body; and that, when the supply of energy is generous, the rate of retention of nitrogen is not much influenced by the plane of protein intake at levels above 10% of the ration. The results all point to the belief that in a young pig the growth impulse is so great that the synthesis of body protein is effected at the maximal rate possible with the particular mixture of amino-acids yielded by the proteins of the food. Little difference has been found in the value for growth of the protein mixtures contained in the three cereal grains, wheat, oats and maize. A maximum of 25% of the ingested nitrogen can be retained for growth from any one of these sources. The rate of retention of nitrogen in all cases where a sufficiently high plane protein intake has been fed is limited by the chemical characters of the proteins of the food, and not by the physiological capacity of the animals to grow. When a diet of casein and starch, or skim milk and starch, is fed to a young pig, 50% of the nitrogen ingested is retained by the growing animal. It is thus evident that the physiological limit of the capacity to grow is not attained when all the protein is derived from cereal grain.

From these experiments it is evident that it is not only the quantity of protein but also the kind of protein which must be taken into account in arranging a dietary suitable for different conditions of life.

#### THE QUEEN'S MEMORIAL INFECTIOUS DISEASES HOSPITAL.

The action of the Minister for Health (Victoria) in reducing the estimates for the current year of the Board of the Queen's Memorial Infectious Diseases Hospital at Fairfield appears to have emanated from: a desire to exercise economy, and from an injudicious reference of the matter to two gentlemen who have not properly grasped the conditions obtaining in the hospital. He has made a peculiarly unfortunate mistake in informing the Board that if the estimates as amended by him be exceeded the members would be required to pay the excess amount out of their own pockets. It happens that an Act of Parliament is in existence, known as the Infectious Diseases Hospital Act, 1914. Section 28 of this Act reads as follows:—

28. (1.) If in any financial year the amount received by the Board from contributions under this Act falls short of the expenditure based upon the estimate or estimates for that financial year then the deficit shall be added to the estimate of expenditure for the ensuing financial year, and the rate of contribution for the said ensuing financial year shall be increased proportionately.

Mr. Drysdale Brown has unfortunately allowed himself to be misguided by Messrs. J. Love and T. E. Meek. These gentlemen have not made sufficient allowance for the fact that the population of a fever hospital differs from that of a general hospital, in that the majority of the patients recover long before they can be discharged. These patients, during the period in which they are still capable of spreading infection, are usually very hungry, and as has been pointed out by Dr. W. Jeffreys Wood and Dr. Amess, approximately 60% of them are meat eaters. Moreover, the mistake has been made of criticizing estimates as if they were actual expenditure. Experience at fever hospitals teaches, that while estimates per patient can be made with considerable accuracy, it is impossible to gauge the number of persons who will be admitted to the hospital in a given year. For this reason it is a counsel of wisdom to allow for maintenance on the assumption that the average number of patients will be increased during an ensuing year. Should the estimates be in excess of the expenditure, the excess amount must be deducted from the estimates of the following year. In this manner, no extravagance is perpetrated by a liberal estimate.

A critical examination of the scrutiny of the original estimates of expenditure submitted by Messrs. Love and Meek to the Minister reveals the fact that no good ground for reduction has been adduced. The proposal to reduce the expenditure in regard to foods, such as meat, milk, butter, groceries and bread, will not bear investigation, since it can be shown that the amount of each of these commodities allotted to each person, including patients and members of the staff, is not excessive. The view taken by Messrs. Love and Meek that the culture tubes should be prepared by an attendant, under the supervision of a doctor, is one which reveals a lack of experience. In an institute fully equipped for pathological work, with medical men and attendants devoting their full time to the laboratory, economy may be exercised by the preparation of culture media, but it has been found in the Metropolitan Asylum Board Hospitals, as well as in many other hospitals, in which the staff is working at full pressure, that it is cheaper in the end to purchase some, if not all, the media. The sum involved is £80 per annum, and the Minister would be well advised if he did not press this point. In regard to furniture, bedsteads, blinds, etc., it may be pointed out that a relatively large amount was included in the estimates for these purposes, because the Minister had previously disallowed the purchase of new beds, etc., for the purpose of replacing the articles in indifferent repair. The objection raised to the increase of the nursing staff by 16 probationers appears to have been made without due consideration to the conditions obtaining. Of these 16 probationers, 11 would be required for the new isolation block, which

is approaching completion. Similarly, the complaint of extravagance in connexion with the wages of employees and with the administration generally does not appear to us to be justified, in view of the nature of the institution.

Attention should be drawn to the fact that both Dr. W. Jeffreys Wood and Dr. J. Amess have been appointed to the Board by the Government, that the latter has had considerable experience in the administration of hospitals, having served for upwards of eight years as Medical Superintendent of the Melbourne Hospital, and, finally, that, in the absence of any cause for complaint in regard to the amount actually spent in past years on the maintenance of the institution, the Minister should have shown confidence in the Board and especially in the representatives of the Government and should not have adopted the irritating and sterile course of seeking inexpert outside advice. We learn that the Premier is being approached with the request that the matter be investigated by some competent authority, and we have no doubt that Mr. Drysdale Brown will recognize that he has been unwise in acting on the recommendation of his two advisers. There is trouble enough in the world to-day, without creating unnecessary difficulties. We hope that we shall hear no more of this unfortunate incident.

#### THE TOBACCO FUND.

We are pleased to record that during the past week or ten days a number of fresh subscriptions have been received for our branch of the Over-seas' Club Tobacco Fund. We again invite members to send a shilling or two, in order that the list may be representative of the various districts of the Commonwealth, and that the next amount remitted may be substantial.

#### Second List.

	£	s.	d.
Amount previously received .....	1	5	0
Dr. W. P. Cormack, S. Aust. ....	0	5	0
Dr. G. C. Hayward, Adelaide .....	2	2	0
Per Miss D. Henderson, Melb. ....	0	10	0
Miss W. Rhodes, Sydney .....	0	10	0
<b>Total .....</b>	<b>£4</b>	<b>12</b>	<b>0</b>

#### A BOGUS CERTIFICATE.

Our attention has been called by the Medical Board of Western Australia to the case of a man calling himself James Johnston Drummond, who attempted to obtain registration on the basis of a false certificate. He is described as a very tall man, of heavy build, with a slight stoop. He is about 60 years of age. It appears that, toward the end of February of this year, Drummond made an application for registration to the Medical Board. He lodged a certificate with the Secretary. This certificate, he explained, was obtained for him by friends in Edinburgh, to replace the diploma of a Doctor of Medicine, which he had lost. According to his own story, he had obtained the degree of M.D. of the University of Edinburgh, in 1888. He did not register his degree in the Medical Register of Great Britain, as he left Europe shortly afterwards. He practised in Brazil, the United States of America, Mexico and other American countries. He claims that he obtained other degrees in the United States, in Canada, and in Brazil. He was compelled to fly from Mexico during the revolution, and, in his flight, lost his certificates, etc. The certificate produced bore the following legend:—

#### University of Edinburgh. Certificate.

This is to certificate that James J. Drummond graduated in Physics in the class of 1888 at this University. Was granted degree of Doctor of Medicine.

JOHN MILLAR.

It appears that the nature of the certificate did not satisfy the Medical Board, and "Dr. Drummond" was informed that, on its evidence alone, registration could not be effected. He announced his intention to fight the case, but since then he has left Western Australia, with the avowed intention of going to Sydney and starting practice there. It may be mentioned that he had sought registration for the purpose of taking up the position of Medical Officer at the Ravens-thorpe Hospital.

The Medical Board has communicated with the University of Edinburgh, and has learned that the certificate submitted, of which a photograph was sent to Scotland, was not issued by the University, that no degree of doctor of medicine had been granted to any James Johnston Drummond, but that a James Johnstone Drummond had graduated in Arts in 1888. This gentleman is now a minister of the Church of Scotland, and resides in Jodburgh. In view of the foregoing facts, the Medical Board of Western Australia has brought the matter to our notice, and we venture to publish the details for the information of other Medical Boards and of the medical profession throughout the Commonwealth.

#### Medico-Legal.

##### A DISPUTED WILL.

(By a Legal Correspondent.)

Judgement was delivered by his Honour Mr. Justice Street, on August 4, 1915, in the suit brought by Dr. Edgar Robert St. John Caro against Maud and Dora Duncan and Sophia Jamieson for a grant of letters of administration, with the will annexed, of the estate of the late A. D. F. Jamieson. The will referred to was in the following terms:—

"I, Arthur Dingwell Fordyce Jamieson, of Sydney, New South Wales, being of sound mind, do hereby bequeath all moneys and belongings, belonging to me at the time of my demise, my just debts being first liquidated, to Edgar Robert St. John Caro, to be employed by him in Church work and to help the poor. This includes moneys due to arrive shortly from England.

A. D. F. Jamieson.

Witnesses:

Eleanor Mary Harrison,  
Neich Parade, Burwood, N.S.W.  
Robert Ebenezer Austen,  
East Crescent Street,  
McMahon's Point, N.S.W.

The caveatrices opposed the making of the grant on the ground that the testator was not of sound and disposing mind, and alleged undue influence on the part of the doctor, besides raising certain legal defences. The plaintiff first called in evidence the two attesting witnesses. Mrs. Pearce (at the time of the will Miss Harrison) stated in cross-examination that she was the plaintiff's sister-in-law, and had been during the deceased's illness, and in all for six weeks, acting matron of Dr. Caro's hospital. The only training she had received, save in one isolated case, had been in Dr. Caro's hospital, and the only certificate she held was from him. Her evidence was that the deceased died between 12.30 and 1 o'clock of January 5, having come into the hospital on Saturday, January 2, 1915. She deposed to various conversations with Jamieson of a minor character, and apparently of short duration, and stated that he was conscious up to about 8.30 p.m. of Monday, when he lapsed into unconsciousness. The witness only took a record of the names, addresses and ages of patients, and not of the disease, and otherwise only acted under Dr. Caro's instructions. As to the class of patient in the hospital, some came from the country and some from the city. On being pressed, however, Mrs. Pearce could only name one patient who came from the city. Dr. Caro had



told her at the time of the patient's admission that he was suffering from heart trouble, owing to drink. She gave him the medicine and treatment ordered by the doctor, but was not aware of the nature of the medicine. She denied that the patient was swollen, and stated that up till 7.30 on Monday he was moving about in his bed, sitting up and lying down. Nurse Young was giving him his medicine and fomentations over the heart. She stated that at the time she went into the room when the deceased made the will, Austen, a male nurse, was also there. Her evidence as to the making of the will was similar to that of the doctor. She admitted that Austen was sometimes used when patients were violent, but he was only with Jamieson in case he was wanted. The patient had not passed any urine in her presence, but she saw him returning to his bed after having left the room for that purpose. She had never filled up any part of a form setting forth what any patient was suffering from.

Robert Ebenezer Austen deposed to being a male attendant at the hospital, but receiving no remuneration, as he had come there for the purpose of studying for a doctor. This was also the case with the other two male attendants. He had been sent into the room an hour before the will was made, viz., 5 p.m., and remained there till 9.30. The patient became unconscious at about 8 p.m. During the time he was there the patient made no remark to him, but had answered his questions. The witness then gave an account of the circumstances surrounding the making of the will so far as he had observed them.

William James Asslain, conveyancer (clerk at Messrs. Bowman and Mackenzie's), stated that he had known the deceased for many years, the latter being a relative of his mother's by marriage. He had been in the habit of coming to Sydney for some years at intervals, and indulging in long periods of drinking, after which the witness would take him into his home for a few days, and then despatch him to the country. He had seen the deceased on December 23 and 30, 1914, and on both occasions he was filthy, and absolutely incapable, through drink, of transacting any business. The deceased had stated that he had been on the spree for about six weeks.

The death certificate given by Dr. Caro was put in evidence, and showed the primary cause of death to be suppression of urine lasting over a period of 36 hours, and the secondary cause chronic alcoholism of four years' duration. Dr. Charles Bickerton Blackburn, on being shown this certificate, stated that he would take it that the patient died of uræmia. He presumed that the alcoholism caused the kidney disease, which the deceased must have had in a chronic form in order that suppression of urine could kill him in 36 hours. The witness stated that he had never seen anyone capable of making a will within 24 hours of his death under such circumstances. Dr. Harold John Ritchie gave evidence to the same effect.

The plaintiff being called, in reply, stated that he held the degree of M.D., Michigan, and had been in practice for 20 years. On being called in to see Jamieson he found him suffering from marked heart symptoms owing to his having stopped taking alcohol. He saw him at 9 o'clock the same evening, and approximately three times a day afterwards until he died. The symptoms were those of heart weakness. Witness then gave his evidence in regard to the making of the will. In reference to the death certificate he admitted that it did not describe the cause of death accurately. The correct description should have been heart failure, accompanied by partial suppression of urine. The reason witness wrote "suppression of urine" only might seem almost childish, but it was quite plausible. The next entry after the cause of death was "Duration of disease in years, days, months and hours." Since the practitioner was required to give a definite time, he had, if possible, to record one cause of death and not two. He had never been busier in his life than at the time when the undertaker's clerk came to him. His hospital and rooms were full of patients. He rushed in to see the assistant, and hurriedly wrote out the certificate. He distinctly remembered his thought at the time, that Jamieson had heart failure, and also partial suppression of urine. He thought heart failure was so often on certificates that he was glad to write partial suppression

of urine, which he now regretted under the circumstances. Plaintiff further denied that he employed men to get patients for him in the hotels and at the railway stations. In cross-examination he denied that as a matter of fact all surgeons and physicians of any standing in the city were members of the British Medical Association, and gave as an example Dr. Beegling, of Newtown. He could mention a good number of others, but would have had to look up their names. He had been twice invited to join the British Medical Association,\* but had refused, and was prepared to give one reason for so doing. He came to Sydney as a young man, and took charge of a hospital at Summer Hill, and was not aware this hospital had been black-listed by the British Medical Association. He called in consultation the then President of the British Medical Association, and asked him to come and see a dying patient. The relatives, as well as the patient, desired his presence, to see if anything could be done to save his life. The answer through the telephone was: "No; I am damned if I will." He asked again, and said: "This is a dying patient. Will you come for humanity's sake?" The answer was: "I am damned if I will."

He considered that the deceased was suffering purely from a weakness of the heart, due to sudden stopping of the alcohol. He gave him a tablespoonful of brandy at the hotel. Although the patient complained of pain in the cardiac region, witness did not consider that he was suffering from pain, but from distress. He would say that he was first suffering pain on January 2. His prescriptions, in addition to brandy, were  $\frac{1}{30}$  grain of strychnine twice a day, and tincture of digitalis, tincture of strophanthus, and spirits of nitrous ether. He had examined the urine, and found a small trace of albumin. Thirty-six hours before the testator died witness considered the urine was scanty; it grew rather more scanty, and finally the secretion had stopped. He thought that the kidneys had practically ceased acting until he learned from his attendant that they had not done so. He had administered immediately after the will was made a powerful drug, which he knew, in the patient's condition, might affect him seriously. This drug was morphine, of which he gave a quarter of a grain, followed in an hour by another quarter of a grain. The first dose was administered about 5 o'clock, and the second about 6 o'clock. He did not regard such a dose as a large one. He usually gave such a dose after surgical operations. He had not held any consultation with any other practitioner before adopting this course. Witness had ordered hot fomentations to be applied to the patient's heart. He considered this to be one of the best means of stimulating the heart when it flagged after surgical operations, or at any time. There was not a single attendant at that hospital, male or female, who, as far as he knew, had had any experience in another hospital. He considered hot fomentations far superior to ice bags. After re-examination of the plaintiff further evidence was adduced on his behalf. His Honour, in giving judgement, stated that the plaintiff had failed to discharge the onus cast upon him of satisfying the Court in the suspicious circumstances of the case that the testator was of sound and disposing mind at the time of making the will in question. The plaintiff's explanation of the death certificate was, in his Honour's opinion, lacking in genuineness and sincerity, and his Honour did not therefore know whether the testator was suffering from uræmia or not. The plaintiff had not been candid or frank in his account, which might have assisted the Court considerably. He therefore dismissed the suit, but in view of the plaintiff's lack of candour and frankness, he made no order as to his costs. At the same time, he stated that so far as any evidence before him was concerned, there was nothing to show that Dr. Caro had been guilty of any deliberate mistreatment. In regard to the attack on his method of conducting his hospital, if there were anything at fault, that could be dealt with under the Private Hospitals Act.

Mr. O'Reilly (instructed by Messrs. Dawson and Herford) conducted the plaintiff's case, and Mr. Loxton, K.C. and Mr. Cecil Cohen (instructed by Messrs. Bowman and Mackenzie) appeared for the defendant.

\* The Court did not admit any evidence contravening this statement.

## Abstracts from Current Medical Literature.

### DERMATOLOGY.

#### (73) Spurious Erythromelalgia.

F. Parkes Weber records a case of non-syphilitic arteritis obliterans in a Jewish tailor (*British Journ. Dermatology*, June, 1915). The illness had existed for three years. From the point of aetiology the patient denied having had any kind of venereal disease, and his serum gave a negative Wassermann reaction. He had not abused alcohol. He smoked eight or nine cigarettes daily. The affection was at first confined to the left lower extremity. Later, the right foot became affected. The distal portion of the feet was red or cyanosed, and he suffered from a kind of intermittent claudication on walking. Every five minutes he was compelled to stop walking on account of pain in the sole of the foot. The pain passed off in a few seconds. Weber points out that true intermittent claudication is quite distinct from this symptom. The red or bluish-red colour of the foot varied to a certain extent, but was never absent. In neither foot was there any pulsation of the dorsal artery. There was no wasting and no anaesthesia. The brachial-systolic blood pressure was 120 mm. Hg. Various forms of treatment had been tried without benefit. The term erythromelalgia indicated a painful condition of an extremity, associated with redness, was applicable to the condition described, but was probably applied originally to another form of disease.

#### (74) Angiomata Treated by the Injection of Boiling Water.

After describing the clinical and pathological characters of angiomata, Francis Reder (*Surg. Gynaec. and Obstet.*, July, 1915) calls attention to Wyeth's method of injecting boiling water into the tumour as a curative agent. The author has had very gratifying results from this treatment in a series of 26 cases. In four the angioma was situated on the tongue; in one it was on the right middle finger, and in another in the left gluteal region. In all the other cases the tumour was on the face or scalp. Reder points out that Dawbarn's method of dissection and ligation of the arteries is not applicable to many angiomata. He maintains that strangulation by chemical means, or by electrolysis, only yields partially good results. Injection of alcohol, etc., has proved disappointing. The boiling water method is quite simple. It is essential that the water injected should be as nearly boiling as possible. For this purpose a glass syringe, fitted with an asbestos piston, is recommended. The boiling water is sucked up into the syringe after the needle is in place, and injected forthwith. The syringe can be handled if the surgeon wears chamois-

ette gloves. If possible the needle should be introduced in the neighbourhood of larger arteries leading to the tumour, in order that the blood contained may be coagulated at the commencement of the treatment. It is necessary to avoid production of sloughing of the tissues. When the skin begins to turn grey the injection in that area should be discontinued. Hyperdistention must be avoided. The amount of water to be injected varies according to the tumour, and should be just sufficient to produce bleaching. A tumour of the size of a hen's egg may require from three to four ounces. In large tumours, however, it is advisable to attack one portion at a time. In some instances the author made three or four injections at intervals of about two or three weeks. Shortly after the injection oedema appears, which may be very extensive. Although the oedema looks alarming, there is no reason for anxiety, and it usually disappears within a week. Reder points out that the cure is a gradual process, and that the greatest progress takes place from the second to third week. At the end of the first week the tumour is found to be pale, and should be hard to the touch. Should there be any evidence of softening, with visible formation of new blood vessels, an immediate injection is indicated. He gives full details of two cases dealt with in this manner.

#### (75) Clean Dermatology.

Alfred Eddowes (*Med. Press and Circular*, June 2, 1915) devoted his Presidential address at the New London Dermatological Society to a recommendation of cleanliness in its surgical significance in the treatment of skin affections. He points out that the whole treatment in the case of ringworm, red eczema, sycosis and other parasitic diseases consists in killing the bacteria or parasites. He instances a series of cases of red eczema on the scalp which had proved extremely obstinate. His remedy was very simple. He cleaned up the skin with spirits, and then applied the same ointment or paste that had been used before. The chemical cleaning acted like magic. In another case, the eczema had involved the head, trunk and limbs, and had given rise to intolerable itching, smarting and burning. He proceeded to clean the surface up with spirits, and as the spirit was evaporating he applied a powder containing a permanent, non-irritating, somewhat insoluble antiseptic. This was calomel. Cleaning up with alcohol, methylated spirit, or ether is often more efficacious than autogenous vaccines or internal medication. Boric acid, carbolic acid, and other substances may be used. The use of ether has many advantages, not the least of which is its power of dissolving vaseline. It is especially valuable in parasitic diseases of the nails, and in obstinate psoriasis and lichenization. Unless the patient can be trusted to use so inflammable a substance, the practitioner would be wise to apply it himself.

#### (76) The Pemphigoid Eruptions.

In discussing the condition known as the pemphigoid eruptions, J. M. H. Macleod limits these affections to the group of dermatitis herpetiformis, excluding pemphigus neonatorum and pemphigus acutus (*British Journ. Dermatology*, June, 1915). He points out that there are three cardinal features which weld the different eruptions sufficiently closely together to suggest that they are variants of a common morbid process. (i.) Multiformity in the eruptions; (ii.) herpetiform grouping, and (iii.) intense subjective symptoms. The eruptions vary as far as the initial lesion is concerned. Several types may occur synchronously. The type may vary in different attacks, and there may be differences in the stage of evolution of individual lesions. Lastly, there are endless differences in distribution and grouping. The lesions include prurigo-like papules, papulo-vesicles, vesicles, bullae and erythematous, or urticarial patches. The vesicles vary in size from that of a pin's head to that of a lentil. They may be acuminate or rounded. The bullae vary in size from that of a lentil to that of a walnut, but they are usually the size of a bean. The contents of the bullae and vesicles are at first clear and sterile, but they soon become opaque and purulent from secondary infection. Bullae were met with in about 37% of the cases, erythematous patches in 26%, and urticarial lesion in 7%. The common lesions are pustules and vesicles. Herpetiform grouping was present in almost all the cases of adults. It is often absent in children. Subjective symptoms consist of pricking, burning, itching or actual neuralgic pain, and are usually paroxysmal in character. The general health is usually unimpaired at the commencement of the illness. General symptoms supervene as the results of septic absorption. The mucous membranes are usually not involved. There is often a marked coarse granular eosinophilia, but this is by no means constant. The conditions occur at any age, but the most common age period is between 20 and 40 years. Pregnancy is the most definite determining cause, and cases have been recorded as *herpes gestationis*, *herpes gravidarum* and *hydra gestationis*. Disordered menstruation appears to have some aetiological connexion with the condition. It occurs in neurotic individuals, often follows a chill, and has been recorded in association with the administration of certain drugs. The differential diagnosis has to be made from impetigo herpetiformis, and from other conditions. The bullae are much smaller in dermatitis herpetiformis than in chronic pemphigus, the lesions tend to be grouped in a herpetiform manner, or in rings, or gyrate patterns, while in pemphigus the distribution is irregular. So far no pathological changes have been discovered, either in the internal organs or in the nervous system in the pemphigoid eruptions. The treatment is not satisfactory. Arsenic appears to do most good. Sal-

varsan is said to have led to some improvement, but not to cure.

#### (77) The *Ætiology of Herpes Zoster.*

Head and Campbell showed in 1900 that the peripheral manifestations in herpes zoster were due to lesions in the corresponding posterior root ganglia. These lesions appear to be due to some bacterium. In 1913 Sunde demonstrated a gram-positive diplococcus in a hæmorrhagic Gasserian ganglion in a case of ophthalmic herpes. E. C. Rosenow and S. Oftedal (*Journ. Amer. Med. Assoc.*, June 12, 1915) have sought to supply the experimental evidence to prove that these ganglionic lesions were due to bacteria. Herpes of the skin, tongue and lips, and corresponding ganglion lesions were produced in rabbits and other animals by the intravenous injection of streptococci obtained from extirpated tonsils, from pyorrhæal pockets, and from other situations. The lesions in the ganglion were found in the majority of cases to be hæmorrhagic, and to be characterized by a round cell infiltration. Gram-positive diplococci and short chains were found in and around these lesions. The cocci were not discoloured in the peripheral lesion. The same applies to herpes in man.

### BIOLOGICAL CHEMISTRY.

#### (78) Permanent Preparations of Urease.

The use of urease for the estimation of urea in urine and in blood is likely to become widespread owing to the high degree of specificity possessed by the ferment. D. D. van Slyke and G. E. Cullen (*Journ. of Biological Chemistry*, October, 1914) have found that the enzyme can be readily prepared in the form of a soluble active powder, which can be accurately standardized, and which maintains its activity for an indefinite period of time. When a watery solution of the ferment is poured into a volume of acetone so large that the enzyme undergoes practically instant dehydration, the enzyme is precipitated with little loss of activity. The precipitate can be dried in vacuo, pulverized, and kept indefinitely. Another method which yields at once a permanent and soluble preparation consists in concentrating the aqueous extract of soy beans at room temperature over sulphuric acid in a vacuum of less than 1 mm. pressure.

The following method is recommended for urine: Into a large boiling tube 0.5 c.cm. urine, 5 c.cm. of 0.6% potassium di-hydrogen phosphate, and 1 c.cm. of 10% urease are measured. The mixture is allowed to stand for 15 minutes. Into a second tube 25 c.cm. decinormal acid and 1 drop of 1% alizarin red are placed. The tubes are joined so that a current of air can be drawn through the tubes. The air is aspirated for half a minute, and 5 gm. of potassium carbonate are added to the tube containing the urine. The current of air is aspirated until all the

ammonia has been carried over to the acid. The excess of acid is then determined by titration with decinormal soda. The ammonia preformed in the urine can be determined in a similar way, but without the urease. The two determinations can be performed together, with tubes arranged in series. Urea can be easily estimated in blood and spinal fluid by this method. The coagulation of blood is prevented by the addition of sodium citrate. Three cubic centimetres of the citrated blood, 3 c.cm. of the phosphate solution and 1 c.cm. 10% urease are employed.

#### (79) Renal Function in Tartrate Nephritis.

F. P. Underhill and N. R. Blatherwick have observed that the rate of elimination of phenolsulphonethalein may be markedly decreased in the acute stages of nephritis due to racemic tartaric acid (*Journ. of Biological Chemistry*, Sept., 1914). In the chronic condition the excretion of the dye improves to a certain extent, but does not regain the normal, at least during the period of these investigations. In some animals of this series the glomerulus of the kidney has been injured as well as the tubule. During tartrate nephritis the hydrogen ion concentration in the blood varies little from that observed in starvation before the administration of the tartrate. When excretion by the kidney is prevented phenolsulphonethalein is eliminated in the fæces through the bile. After tartrate injection the average nitrogen excretion is little changed from that observed previously. Although the rate of elimination is undoubtedly diminished the total amount of the nitrogen excreted is unchanged. The rate of elimination therefore may not mean that the renal organs are inefficient. It is suggested that this observation may explain the longevity of persons suffering from some forms of human nephritis.

#### (80) Formation of Glucose from Citric Acid in Diabetes Mellitus.

I. Greenwald (*Journ. of Biological Chemistry*, July, 1914) has administered sodium citrate to a patient suffering from diabetes. Although sodium citrate is extensively used in the treatment of diabetic acidosis, no attempts seem to have been made to ascertain whether citrates give rise to glucose in the body. The patient exhibited a G:N ratio of about 3.65, which is a high ratio. The administration of citrate was followed by an output of glucose corresponding to the amount of sodium citrate. This shows that the six carbon atoms in the citric acid are converted into glucose. The excretion of acetone and beta-hydroxybutyric acid was increased probably as the result of the liberation of the large amount of alkali from the sodium citrate. The experiment was repeated twice with the same results. The patient lived nine months after the experiments. The administration of the

citrate to phloridzinized dogs was followed by an increased excretion of glucose indicating the conversion of the six carbon atoms of citric acid into glucose.

#### (81) Urea and Non-protein Nitrogen in Human Blood.

F. C. McLean and L. Selling (*Journ. of Biological Chemistry*, Sept., 1914) have repeated the experiments of the French school on the relations of the amounts of urea in the blood and the urine with accurate methods. They have estimated the total non-protein nitrogen and the urea nitrogen of the blood, and the total nitrogen and the urea nitrogen of the urine in nine individuals on a large number of occasions. They find that the concentrations of total non-protein nitrogen and of urea in normal human blood are not constant, but vary within wide limits according to various factors of diet, amount of fluid ingested, etc. They find a close parallelism between the concentration of urea in the blood and the amount excreted in the urine in normal individuals under average conditions. The co-efficient of Ambard, when computed from results obtained by the accurate methods of Folin and his collaborators varies in normal persons between narrow limits, and may be regarded as constant. A concentration of urea nitrogen as high as 22 mgm. per 100 c.cm. of blood does not necessarily indicate any disturbance in the elimination of urea, provided the co-efficient of Ambard is normal. The ingestion of urea does not materially alter the value of the co-efficient provided a sufficient length of time is allowed for absorption before the examination is made.

#### (82) The Analysis and Cost of Foods.

Graham Lusk (*Journ. Amer. Med. Assoc.*, May, 1915) discusses foods under three headings: firstly, value of flavour; secondly, the importance of composition, and thirdly the importance of quantity. In regard to flavour, it is important to remember that food not only makes the mouth water, but also the stomach. In regard to composition, he points out that the diet must be so ordered as to supply the requisite amounts of the essential food-stuffs, and in addition must contain salts and vitamins. He concludes that in the United States there is no deficiency of protein, salts or vitamins in the habitual diet. He is of opinion that steps should be taken to educate the public to the need of an economical selection of articles of diet. He suggests that a well-balanced ration containing 1000 calories should be sold as cheaply as possible. For example, a ration of pork, cooked beans, bread, butter, milk and coffee containing 1000 calories can be prepared at a cost price of 2d. He discusses at length the food value and cost of various dishes sold at restaurants in the country. He appends a series of selected menus, showing their actual cost and food value.



## THE LIVERPOOL ARMY MEDICAL CAMP.

The military authorities have been called upon to undertake a complex task in providing and controlling efficient training-camps in the various States throughout the Commonwealth. It must be remembered that the problem meant new ground to be broken for the first time, and that an unfortunate amount of unpreparedness existed when the Empire found itself involved in the greatest war of all times. It is not an easy matter to congregate three, four, five, six, seven, eight, nine or ten thousand men in one concentration camp, and to provide healthy quarters, suitable environment, proper food and clothing and protection against all the noxious agents which might impair the efficiency of the men as soldiers. It is not our intention to discuss in this article the suitability of Liverpool for its present purpose, and we may dismiss this subject briefly with the remark that the low-lying ground, the nature of the soil, and the topography generally has tended to make the site less healthy than it might have been. Apart from the direct effect of a more or less swampy field on the thousands of men in training, there is a matter of policy which should be taken into consideration. Sydney recruits are justified in wishing to be within easy reach of the metropolis of New South Wales, in order that they may visit their relatives from time to time, or receive visits from them. But the facility for journeying to the city offers to the country recruit an opportunity of facing the dangers of city life, and the authorities have themselves to blame if the number of drunken men in khaki seen in Sydney is not inconsiderable.

At the far end of the camp, removed some mile or more from the railway station is a detached portion of the camp, which is recognizable as the Army Medical Camp by the red crosses displayed. A short distance of untented ground separates this from the "lines." The approach is characterized by a railed-off department, with a sort of courtyard in front of a capacious tent. At the entrance of this space is a notice-board, bearing the signature of Captain Schlink, and traces of having been exposed to the effect of the weather for some time. The legend on this board is plainly visible to everyone approaching the tent. The notice has reference to the men attending sick parade. Non-commissioned officers in charge of these men are requested to parade the sickest men first, in order that those who need medical attendance most urgently are not kept waiting. This notice is significant, in view of some of the criticisms which have been levelled at the officers in charge of the camp.

The tent itself is equipped as a dispensary, and has small tables for the medical officers on duty at the parade. The arrangement is obviously a compromise. The ideal out-patient department, well-warmed, with numerous rooms for special examination, hosts of students to assist in the treatment of minor ailments, nurses and attendants galore to weed out the patients for special examination, and all the various ingenious devices born of experience, which go to facilitate the work of the departments attached to the great metropolitan hospitals, are wanting. These facilities could not be provided under the existing circumstances. Perhaps they would be inadvisable for men under training. A large tent has been provided for men waiting their turn to be examined. On a certain day following a severe storm, this tent had given way and lay, useless and disorganized, a tangle of canvas wrecked by the wind. The commanding officer has made the best of the conditions provided. Varying numbers of men are paraded four times a day, and are dealt with as well as the limited number of medical officers and the restricted space will admit of. The examination itself must offer some difficulty. It appears to us that the difficulty might be overcome by the provision of extra tents for the examination proper, and by the erection of inner screens to shut out some of the extraneous noises. It must be almost impossible to use a stethoscope properly under the conditions obtaining. Of the dispensary portion of the tent little need be said. It might be urged that few medicines are endowed with specific therapeutic action. But the suggestive value of a bottle of medicine is undoubted, and it seems to be wise to surround the dispenser with a barrier in order that the mysteries of dispensing

are removed from the public gaze. We would certainly have preferred to have seen a dispensary with less bustle, less exposure and more order. The man in charge should be responsible for all that occurs in his department, and this seems to be practically impossible if the dispensary tent is a thoroughfare. In spite of these small defects, the arrangements for the reception and examination of the men declaring themselves sick are not unsatisfactory. It must be understood that urgent cases of sickness are received into the Army Medical Camp outside the hours of sick parade, and that the vast majority of the men joining the parades are suffering from colds or other minor ailments.

The hospital itself is in a state of transition. At present, "tortoise" tents serve as wards, and these tents are quite suitable for their purpose, in the absence of rigid structures. The number of men acutely ill in bed in the tents was surprisingly small when the camp was inspected. Each man lay on a low, regulation bedstead, with a mattress of fibre. The mattresses vary somewhat in pattern. All of them are suitable, and the patients express the opinion that they are comfortable to lie on. The blanket, etc., provide sufficient warmth. Two or three hundred yards higher up the hill a quadrangle of corrugated iron and wooden buildings is in course of erection. One of these huts had already been taken into use as a ward at the time of the inspection. This ward contains 14 beds. The bedsteads and bedding are the same as in the tent wards, and the general arrangements differ only in that the walls and roof being solid, it is easier to keep the place tidy. At the far end of the ward is a small antechamber, which serves two purposes. On the one side there is provision for the reception of meals and for various things that have to be kept close to the ward proper. On the other side there are clean bed pans and urinals for use in the ward. After use, the pans are taken to the latrines and emptied, and are cleaned before being returned to their places. These wards serve their purpose well. In regard to the equipment, the same difficulties have to be faced in Liverpool as elsewhere. It is not always possible to obtain a sufficient supply of necessaries. Some of the more ordinary commodities which are listed are not at hand when required, and in this manner a certain amount of overlapping of the Department and the Red Cross Society has taken place. As far as could be ascertained, the hospital contained the necessary instruments and articles, and it is reasonable to assume that, as the occasions may arise, additional articles will be supplied to complete the equipment.

The iron and wooden structures or huts provide, in addition to wards, an operation theatre for minor surgery, a miniature out-patient or examination department, which is an improvement on the sick parade tent, and the various administrative buildings. As is usual in temporary military structures of this kind, there are too many men hanging about the last-named, and the general impression gained from a visit to the camp is that the rooms are too small for their functions, and that the deficiency in medical officers is made up by an excess of orderlies and "boys."

The staff quarters are almost picturesque. An officers' mess tent, with a neat map of Australia, composed of sand and coloured stones, with a delightful kangaroo and a man-o'-war as embellishments in the foreground, has a homely appearance. The sleeping tents and the whole enclosure have been carefully planned, and are not devoid of small, inexpensive luxuries, which owe their existence to the ingenuity of the ambulance men.

The little collection of tents and huts is supplemented by the measles camp, the isolation camp for contacts, two cottages and the venereal compound. The measles camp contains marquee tents and "tortoise" tents. From a purely medical point of view, no exception could be taken to the treatment of morbill patients in "tortoise" tents, since Boobyer and others have demonstrated that infective diseases can be treated with success in open-air shelters, even in England. But there is a disadvantage in placing the measles camp with practically open tents in close proximity to the roadway and in full view of every visitor to the camp. The actual arrangements in the measles compound are identical to those in the hospital compound. The

medical staff is the same, and in this we see a grave defect. In the ordinary fever hospitals, doctors and nurses attend patients suffering from infective diseases and no one else. The strictest regulations exist in regard to the wearing of washing overalls or gowns to protect woollen or cloth clothes from carrying infection. At Liverpool we sought evidence of some precaution to limit the spread of morbilli, but failed to detect any. The measles contact isolation compound is situated a considerable distance further from the camp. The two cottages contain four wards for two or three patients each, and some offices. No. 1 is reserved for patients who are acutely ill, and we understand that the accommodation has hitherto proved sufficient. No. 2 cottage is reserved for cerebro-spinal meningitis. The structural arrangements are primitive, but inasmuch as trained female nurses are employed in these cottages, cleanliness is noticeable, and the patients are made wonderfully comfortable, in spite of the seemingly unfavourable surroundings. It may be pointed out that the patients in these small cottages receive more individual attention from the three nurses on duty in each cottage than they would in a general hospital where a large number of patients are tended by a relatively small number of nurses. The kitchen is in charge of a male cook, who exhibits some skill in persuading a highly defective stove to produce a tasty dish. The sanitary arrangements are well managed by the nurses, and an attempt is made to cover the defect of the absence of a drainage system.

The latrines have been before the public through the medium of the Departmental Enquiry. Suffice it to say that the pans are kept fairly clean, that a sufficient supply of soil or sand is kept and is used, and that the odour is not excessive. One grave defect should be emphasized. The contractor who removed the pans once a day refuses to handle the urine buckets. This fact has compelled the authority to construct urine pits. In the Army Medical Camp, a good, sandy spot has been chosen, and pits have been sunk and provided with wire netting as screens for rubbish and trap covers. A little water-logging occurs, in spite of all precautions, and the resulting odour of ammonia is disagreeable, but not serious. An ingenious incinerator has been constructed on the underground principle, and works well. We are informed that a septic tank system, a hot water supply system, and electric light have been planned, and will be installed in the camp in the near future. If Liverpool camp is to be used for any considerable time, these installations are essential, but the authorities will have to consider whether, after the report of the Commissioner has been issued and after the immediate future has revealed whether epidemic cerebro-spinal meningitis is likely to spread to anything like alarming proportions, it would not be better to break up the camp and to start over again in a number of smaller camps.

The last department, or compound, to be mentioned is the venereal compound. Situated beyond the latrines is an enclosure surrounded with a broad, barbed wire entanglement. This prison is the venereal compound. Open to view, the infected patients lie about, doing no work, and costing the community money to keep. It is the intention of the authority to prevent the spread of venereal disease by refusing these men any liberty. Their number is not great, but, even if the proportion of infected recruits in the camp were considerable, it is by no means certain that the amount of disease present among the community would be materially affected. The soldier may be responsible for an increase of gonorrhoea and even of syphilis at the present time. In the early days of infection, he spreads the disease; then comes a period when he is ill and is less inclined to pass the disease on to non-infected persons. The third period of progressing convalescence is of great epidemiological importance. Isolation of venereal patients will therefore not affect the spread during the early stages, and will only lessen the risk during the convalescent period.

It appears that the patients in this compound belong to one of two classes. There is the reckless, unscrupulous individual who will break bounds if a chance presents itself and who cares nothing for the results of continued illicit intercourse during the period of infectivity. It would

appear that from every point of view this individual is useless as a soldier, and that he should not be sent to the front for economic reasons. To keep him pinned in the compound at the country's cost is sheer waste, as long as the whole of the infected civil population is permitted to spread gonorrhoea and syphilis without let or hindrance. The second class consists of individuals who have been foolish rather than vicious. These men could be treated with less rigour, and after having had a severe lesson, are likely to make excellent soldiers on active service. A little discrimination would enable those in charge to distinguish between the waster and the foolish boy, and rational, selective treatment would render the existence of this obvious prison quite unnecessary. The treatment carried out in the compound is skilled and in every way suitable. At times the men refuse to submit, but after a few days of retention, in the knowledge that they will be kept until free from infection, they find the restraint on liberty irksome, and therefore submit. Salvarsan injections are given, if necessary, to men who pay for the substance, provided that it can be procured.

Regarded from a critical aspect, it may be said that the Army Medical Camp at Liverpool is not as bad as it has been painted. But while it might be much worse, it could be much better. The defects are not due to the Officer in Command or the medical officers under him, but to the whole system. The task which should be performed is an impossible one under the existing circumstances. As an example, it may be pointed out that the extent of pediculosis in the camp is quite unknown. The Officer in Command of the Medical Camp has no power, and his staff is quite insufficient, to make a thorough examination of the men in the "lines" for the purpose of determining the frequency of the body louse among the recruits. But it must be remembered that if this point be neglected, the danger of typhus fever being spread in Egypt, Turkey or elsewhere at the front is very real. Again, as we pointed out in last week's issue, the causal organism of epidemic cerebro-spinal meningitis is found in a large number of faeces of apparently healthy persons during the course of an epidemic. How could the Officer in Command, with his half of a dozen medical officers, deal with four or five thousand men, and ascertain where the focus of the disease is to be found, before it has stolen a march and become uncontrollable? We are told that the bacteriological problem of investigating the faecal mucus of several thousand men is a physical impossibility. Nothing of the kind! If it be possible to investigate one case, it becomes possible to control an unlimited number, but only if the investigation be undertaken by an army of capable practitioners. Every student of bacteriology, who has conducted that form of investigation which aims at the identification of bacteria, knows that it is possible to keep a hundred series of tubes going simultaneously. Culture tubes could be inoculated with the faecal mucus of every man at Liverpool within the course of five days by a dozen men without much difficulty. The discovery of a Gram-negative diplococcus would indicate which men should be kept under special observation, and in this manner it might be possible to localize and control the epidemic in the early days. These and similar reasons should suffice to show that the whole basis of administration is faulty. The number of medical officers safeguarding the health of thousands of Australia's sons who are prepared to risk all for the defence of the Empire is quite insufficient. The Army Medical Camp should be organized from a view of prophylaxis rather than of curative medicine. It would be wise to engage the services of men expert in preventive medicine, of men expert in sanitation, of men expert in hospital administration and of men expert in clinical surgery and medicine. The Officer in Command cannot be expected to achieve the best results unless he has at his elbow men who can deal scientifically with all these problems. In addition, he should be assisted by a small army of smart juniors.

We are told that the number of medical practitioners available for home service is not sufficient for the present needs. If this be so, and there is no reason to doubt it, the supply would be quite inadequate to render the Army Medical Camp quite efficient. What is the alternative? The public has a right to demand that the men receive proper

attention. If the present system cannot provide this, it would be necessary to convert the medical camps into clearing houses, and to draft all sick men to civil hospitals, where the organization and equipment have been proved to be satisfactory during a long series of years. We admit that the Army Medical Camp is worked with skill, and that the most is made of the opportunities given to the Officer in Command and the medical officers under him. More than that, they have shown resource and ingenuity which commands our admiration. But they cannot achieve the impossible, and the work to be done at Liverpool needs a very large staff.

## British Medical Association News.

### SCIENTIFIC.

A meeting of the Victorian Branch was held at the Medical Society Hall, East Melbourne, on June 16, 1915, Dr. Andrew Honman, the President, in the chair.

Dr. Herman Lawrence exhibited a number of patients affected with skin diseases, and some moulages.

Case 1.—Child, aet. 4 years, suffering from *dermatitis herpetiformis*. He had had the patient under observation for five or six months. At one time it looked as if the case might prove fatal. The child was suffering extreme pain, which interfered with her sleep. This was a rare symptom in a young child. The lesions were entirely of the grouped vesicular variety.

The treatment he had employed has been arsenic, and opium to relieve the pain, and carron oil as the local treatment. It was only within the last two or three weeks that she had got any relief.

Dr. Lawrence then showed a moulage of a case of *dermatitis arsenicalis*, taken of the hands of a woman who came from Western Australia. She had suffered with *dermatitis herpetiformis*, and had had prolonged treatment with arsenic. This case had responded well to X-ray treatment.

Case 2 was an instance of large *papular syphilide*.

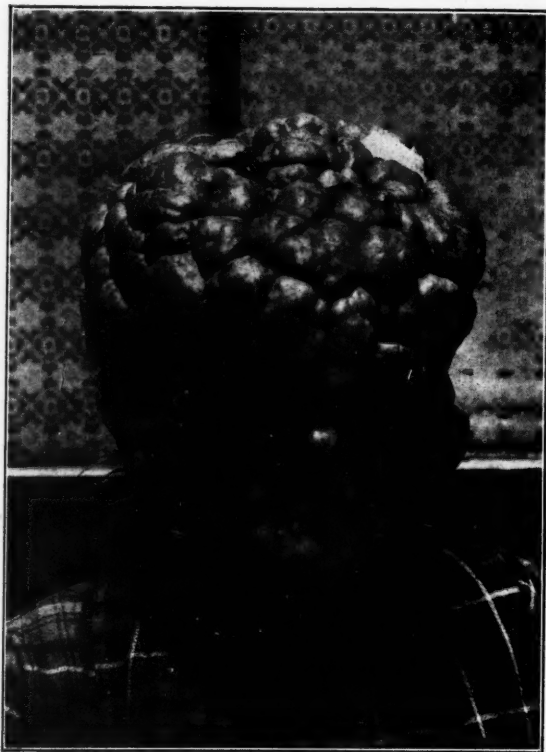
Case 3.—*Lupus erythematosus* with *telangiectic* and *lupus pernio* lesions.

Case 4.—F., aet. 50 years, was suffering from *cylindroma*. When she was about 9 years old she had noticed that her scalp was gradually becoming covered with small growths about the size of peas. The tumours continued to grow until they reached the size and somewhat the colour of red tomatoes; a few growths also made their appearance upon the body. Her mother, who was also under his care, was similarly affected, and as she had been told by medical men that treatment was of no avail, she had allowed the condi-



tion to develop gradually without seeking medical aid. Dr. Lawrence had exhibited a moulage of the head of this patient at the International Dermatological Congress, held at Rome, 1912, when Hoffman and several others expressed the opinion that it was a case of *cylindroma*.

In Sabourand's book on Topographical Dermatology there was an illustration of a similar case under the heading "cylindromes." The condition was described as being benign as a rule, rarely malignant, hereditary, and frequently localized in the scalp. Histologically, it was of the nature of an *aveolar epithelioma*, surrounded by myxomatous tissue.



Pusey, of Chicago, had an illustration of a similar case, depicted in his work on Dermatology. He referred to the condition as *endothelioma capitis*.

In this case the section from one of the tumours showed the epidermic completely flattened out; myxomatous tissue surrounded an *aveolar* structure, apparently of an *endothelial* nature. Under treatment by X-rays the tumours had diminished in size to a considerable extent, and had become more pedunculated in appearance. Tufts of hair had grown from between the tumours. The hair, however, was beginning to fall from the effect of the X-rays. Dr. Lawrence hoped to report the result of radicle-therapy in this case at a later date.

Several cases of *tuberculosis cutis* were exhibited, including a case of *lupus vulgaris*, which had been treated successfully with radium. The last treatment had been given five years previously, and the patient still remained well, there being no evidence of any recurrence of the trouble.

Dr. Lawrence exhibited a moulage of a case of *lymphangioma cavernosum*. The patient was a female, aged 36 years. The right hand and arm were affected. She came under notice 17 years before. The character of the affection had not changed, although the size of the arm, and more particularly of the fingers, had increased. Surgical treatment had been suggested, but the patient refused to submit to this. She had sought advice from Dr. Lawrence, more particularly with a view to lessening the deformity of the fingers. Radium "cross fire," well protected, had been employed, with a view to the selective destruction of the lymphatic structures. The fingers only were being treated. She had improved considerably, and



the treatment had not prevented her from attending to her usual duties.

A moulage was exhibited, representing the condition known as white spot disease, or *morphoea guttata*. Cases of this disease were very uncommon. Dr. Bunch, of London, had recently described the condition in the *British Journal of Cutaneous Diseases*.

The patient was sent by Dr. Mary Henderson, from the Queen Victoria Hospital, for diagnosis. The spots, situated chiefly upon the sides of the neck and front of the chest, appeared like drops of candle grease inlaid in the skin. Small, white, waxy-looking spots, slightly infiltrated, had continued to make their appearance during the past twelve months. These lesions gradually increased to the



size of a split pea, or a little larger, and a certain amount of atrophy, with a corresponding depression in the part, had developed. This gave the spot a shrivelled-up appearance. On the legs the eruption was very extensive, but the spots were not so well defined as those on the neck and chest, and had an inclination to be scaly, producing a slight amount of itching. Histologically, there was a general thinning of the epidermis, with flattening out of the prolongation of the rete, and hypertrophy of the collagenous fibres. The general health of the patient was good. Treatment with arsenic was being tried. Three cases of white spot disease had been described in the *American Journal of Cutaneous Diseases*, of January, 1907.

Dr. G. W. Armstrong demonstrated five patients.

The first patient was suffering from a *nodular syphilide*. The Wassermann test had not been applied. Treatment with binioidide of mercury was being employed.

The second patient was a male, aged 30 years. He was suffering from *lupus erythematosus* of the telangiectatic type. Both cheeks and the nose were affected. The lesions were erythematous, with fine scaling and telangiectases. The distribution was symmetrical. The patient had attended the Eye and Ear Hospital eighteen months previously, and had been treated for corneal ulcer, following an injury. The treatment consisted in giving quinine internally and applying calamine lotion locally.

The third patient was a man aged 40 years, who was suffering from *rodent ulcer*. An ulcer on the side of the nose had been treated with carbon-dioxide snow. Three applications had been made, the first six weeks before and the last a week before. The applications had been of at least one minute's duration. Marked improvement had taken place.

The fourth patient had a *papular syphilide*. Mucous patches were present in the mouth, and there were large papules on the skin of the scrotum. He had had an injection of salvarsan, followed by treatment with mercury given by mouth. There was a marked improvement.

The fifth patient was a man, aged 35 years, who was under treatment for *seborrhoea dermatitis*. The seborrhoea was marked on the scalp, and there was a typical seborrhoeic dermatitis of the lichenous type (Crocker) on the

back, chest and arms. The eruption on the head had been treated with an ointment of sulphur and resorcin, and that on the body with an ointment containing salicylic acid and precipitated sulphur. The patient was suffering at the same time from acne vulgaris. He had had a large number of boils on the back and chest.

Dr. Honman bore testimony as a surgeon to the possibilities of radium in cases in which the surgeon's knife had failed to relieve. A child with a small, tubercular growth came to him. He excised the growth completely; nevertheless, it recurred. Twelve months' treatment with arsenic after the operation had failed to produce relief. He had then sent the patient to Dr. Lawrence, who had employed radium, and had effected a cure by its means.

In a general discussion that followed, Dr. Norman McArthur raised the question whether the cylindroma, which, according to Dr. Lawrence, had lasted for 41 years, could be regarded as malignant, even if the malignancy were low. In reference to Dr. Armstrong's cases, he remarked on the difficulty in obtaining salvarsan and radium. He suggested that Finsen light, or sunlight might be employed in the place of radium. He had been much impressed by the results obtained at the Finsen Institute at Copenhagen.

In his reply, Dr. Lawrence expressed the opinion that one of the cases of cylindroma that had been recorded was of a malignant type, while his own case, and those reported from Belgium, were benign. The mother of his patient had died of an independent affection. The patient herself was not in good health, but he had formed the opinion that the tumour was not responsible for this.

In regard to Finsen light, he stated that he had brought a complete apparatus with him from Europe in 1897, but had used it only a few times. It was troublesome to use, slow in its action, and the effects were not superior to those obtained by the use of radium. Further, as lupus vulgaris was seen so rarely, and the cases were so readily amenable to radium treatment, he did not use Finsen light at all.

A meeting of the Victorian Branch was held at the Medical Society Hall, East Melbourne, on August 4, 1915, Dr. Honman, the President, in the chair.

Dr. Herman Lawrence showed a case of *leprosy*. The interest of the case lay in the fact that it occurred in a boy of 15 years. The boy, a Chinese, was brought to him a week before, when a unilateral eruption was noticed, an uncommon occurrence in skin diseases. The yellowness of the skin suggested lupus non-exedens, but the other symptoms did not support this diagnosis. The boy had been in Victoria at school for the past four years, but five years prior to that, when in China, he had received an injury to the back of his hand. He had probably been infected at that time. It was found that the arm was anæsthetic; there was considerable muscular wasting, and a rosy condition of the nerves was discovered on palpation. Drs. Robertson and Sinclair, of the Board of Health, agreed with the speaker that the case was one of leprosy. The patient was returning to China. It was not easy to diagnose the case with such slight symptoms.

In answer to questions, Dr. Lawrence said that theoretically it was possible for the boy to convey leprosy to others, but highly improbable; the bacilli were in the ulnar nerve. The relation of husband and wife could exist without the one conveying the disease to the other.

Dr. C. G. Godfrey read a paper on alcoholic psychopathies (see p. 163).

Dr. A. A. Brown said that 20 years before he had investigated the physiological effects of alcohol. He had reported that the alcohol of whisky was not the alcohol of gin, and that of wine was different from that of beer. There was as much difference found on examination of the different distillates as there were differences in the proteins of the flesh of cows, of men, or of fowls. The truth was that there was a great variety of alcohols. Some forms of alcohol could be taken in larger quantities without producing an increased effect. The speaker expressed the opinion that there were varieties of insanity created by different alcohols. The kind of liquor drunk played a larger part in the causation of insanity than anything else. If alcohol was well matured there was little risk. The longer it was matured the less injurious was the effect. The general opinion was that the increase of insanity noted was due to

the alcohol consumed. If legislation were introduced to provide that no brands of whisky should be put on the market unless it had matured for 10 years, and no wines unless they had matured for six years, there would be a decrease in insanity.

Dr. Anderson asked what effect was produced by the giving or withholding of alcohol in a case of delirium tremens.

Dr. Godfrey, in reply, said that his experience had not been a small one. He had found it essential in almost every case to give alcohol. In severe cases, where it was withdrawn, the patient invariably became much worse, and the symptoms subsided with the administration of alcohol. If the symptoms, as he believed, were due to the poisonous effect of the antibody created, there would be a sound basis for that view.

Dr. M. F. H. Gamble read a paper on paranoia (see p. 165).

Dr. Ernest Jones said that Dr. Gamble had forgotten to mention that the Kaiser's second cousins, Ludwig and Otto of Bavaria, were paranoiacs, and died with acute insanity grafted upon their disease. This fact tended to make him believe that the same fate would befall the Kaiser. In regard to the litigious character of the patient referred to, some medical men thought that it is easier to give a certificate that a man is sane than that he is insane. However, it was difficult to say a man was sane unless one had full knowledge of his character and characteristics. There was no doubt that the Lunacy Department had suffered from the fact that certificates of sanity had been given by medical practitioners on a superficial knowledge of the patient. These certificates had caused a considerable amount of trouble. He did not wish to reproach anyone, but he trusted that more care would be exercised in future.

Dr. W. A. T. Lind read a paper on insanities due to syphilis (see p. 168).

In answer to questions, Dr. Lind said that he got a large number of negative Wassermann reactions in cases of undoubted syphilis. In every case in which there was a possibility of syphilis a vigorous treatment was adopted in spite of the negative Wassermann reaction.

Dr. R. S. Callender read a paper on the fluid reactions in psychiatry (see p. 171).

Dr. D. M. Officer pointed out that Dr. Callender's communication taught a very important lesson. He could supplement the thesis that syphilitic changes were frequently present under conditions which did not give rise to symptoms usually associated with this disease. He referred to a case of sudden death under chloroform anaesthesia in a child aged 8 years. Death was due to sudden heart failure. At the *post mortem* examination a patch of atheroma, of the size of a threepenny bit, was found in the arch of the aorta. The syphilitic nature of the condition was undoubted. He had learned from this case that chloroform was very dangerous in all cases in which congenital lues might be present. It had been put on the shelf at the Children's Hospital, at all events so far as its use as an anaesthetic was concerned.

Dr. Ernest Jones urged the establishment of a properly equipped psychiatric clinic, with a pathologist and a pathological department at the Melbourne Hospital. The student should be taught psychiatry as well as other branches of medicine, and this became impossible unless proper facilities were provided.

Dr. A. V. M. Anderson said that they would welcome this suggestion at the Alfred Hospital. He made the proposal that a clinical meeting of the Branch might be held at one of the hospitals for the insane, and that a demonstration might be held by a member of the staff. This would be much appreciated.

Dr. Callender, in his reply to various questions, reaffirmed the importance of subjecting the cerebro-spinal fluid to the tests he had mentioned in all cases in which there was a suspicion of general paralysis of the insane. He had not been able to demonstrate the possibility of the transmission of syphilis to the children in the third generation. In one case he had tested the blood of the child of a general paralytic. The father had suffered from inherited disease. The serum of the son gave a negative reaction to the Wassermann test; there were no signs of congenital syphilis in the boy.

#### MEDICO-POLITICAL.

A meeting of the Queensland Branch was held at the B.M.A. Building, Adelaide Street, Brisbane, on August 6, 1915, Dr. D. A. Cameron, Acting President, in the chair.

Dr. H. C. C. Shaw showed a case of *psoriasis*, and Dr. Thelander a case of *oedema of arms and legs*.

Dr. Halford moved:—

"That Council be asked to call a meeting to discuss the position caused by men going to the war, and the arrangements to be made to carry on their work."

The Council recommended as follows:—

(1) "The Council, after discussing the resolution passed at the special general meeting, is of opinion that it would be impossible to make any hard and fast rule as regards the carrying on of practices of doctors going to the war. It advises, where possible a man before leaving should arrange with a colleague to attend to his work. Council is also of opinion that half fees would be an equitable arrangement."

(2) "The Council is of opinion that it has no power over men starting practice, but would draw the attention of members to the resolution passed on August 4, 1914, which reads:—

"That the members of the Queensland Branch of the British Medical Association pledge themselves to undertake the duties of medical men who are called out on active service as their substitutes, and will further decline to attend their patients after their return, or to continue in any appointment which they had held on their behalf."

A considerable amount of discussion took place upon the motion and recommendations. It was resolved that the recommendations of the Council be approved, and that a circular be sent to each member of the Branch, acquainting him with the proposals of the Council.

Dr. Carvosso moved:—

"That members express themselves willing to attend gratuitously dependants of lodge members who have gone to the front until the end of the war."

The motion was carried unanimously.

A meeting of the Council of the Victorian Branch was held at the Medical Society Hall, East Melbourne, on August 12, 1915, Dr. A. Honman, the President, in the chair.

Dr. A. J. Wood moved, and Dr. A. V. M. Anderson seconded, "That a letter be sent to Dr. Fetherston, conveying the sympathy of the Council with him in his bereavement." The motion was carried in silence.

Dr. J. Dunbar Hooper and Dr. S. V. Sewell were elected members of the Council of the Branch, and Dr. Andrews was elected to the office of Treasurer.

A special sub-committee, appointed to consider the question of the provision of trained and skilled nurses for military service, submitted a short report. Before the report was discussed, the Chairman read a letter from Miss E. Glover, to the following effect:—The writer was of opinion that the supply of nurses at the moment was just sufficient to cover the needs of the State; difficulty would be experienced in the event of an epidemic. Fully trained nurses were being paid £60 to £70 per annum. She suggested that some relaxation might be admitted with advantage at the base hospitals. Third-year nurses could be utilized to some extent. The Royal Victorian Nurses' Association might release those of the third-year trainees who had shown themselves to be proficient.

In their report, the Sub-Committee recommended that third-year trainees should be allowed to finish their training at military hospitals. It was quite essential that the soldiers should receive adequate nursing, and for this reason no second-year trainee should be employed at a military hospital. It had been ascertained that there were 248 nurses at the present time at the various homes and private hospitals. When this census was taken, there were 14 nurses disengaged. The number of nurses in the State who had volunteered for service at the front was 704. Over 350 had already gone. There were 300 trainees at the present time in the metropolitan hospitals, 307 in the country hospitals, and 206 engaged in special work.

Dr. Ernest Jones pointed out that some of the nurses in his department should be given facilities for being trained. He moved that 50 of the trainees be drafted, on the recom-

mentation of the head of the Asylum, for one year to general hospitals, for the purpose of qualifying for full training. The motion was seconded by Dr. Kelly, and carried, after the report had been adopted.

The Secretary reported progress in regard to the organization work of the profession for military purposes. A number of replies had been received, and it was most gratifying to note that a very large percentage of the men had responded to the enquiries of the Branch Council.

A prolonged and interesting discussion on the scheme for dealing with convalescent soldiers followed. Various schemes had been adopted in the various districts for liberating medical practitioners for military duty. (The Bendigo scheme has been published in *The Medical Journal of Australia*, August 7, 1915, p. 132.)

#### Richmond.

1. Each practitioner is to have at least four weeks' liberation from practice each year.
2. It is desirable that not more than two men be away at one time.
3. No remuneration shall be paid to practitioners for attendance on the patients of absent men, but in the case of midwifery attendance, half the fee be retained by the deputy.
4. A patient desiring to change his usual medical attendant for the practitioner called in during the absence of the former may not be accepted by the latter until at least 12 months shall have elapsed since the date of the first visit.
5. All records shall be carefully kept.

#### Geelong.

1. A circular shall be sent to each Lodge member on the list of a medical practitioner whose services have been accepted by the Defence authorities announcing the fact, and intimating that Drs. A, B, C, D, E, F, etc., have consented to attend to his patients during his absence. Each member shall be requested to notify the Secretary of his Lodge immediately of the name of the practitioner on whose list he wishes to be placed during the absence of his usual medical attendant.
2. Lodge Secretaries shall be requested to forward to each practitioner a list of members he will be required to attend during the absence of his colleague.
3. All Lodge fees shall be paid by the Lodge Secretary to the representative of the practitioner absent on military duty. In the event of the return of the practitioner: (a) in good health, uninjured, and ready to resume practice, he shall return one-half of the Lodge fees to the practitioners who have acted on his behalf; or (b) wholly incapacitated by sickness or injury, he shall retain all the Lodge fees. In the event of the death of the practitioner, his representative shall retain all Lodge fees, and pay them into the deceased's estate.
4. Midwifery Work.—The practitioner leaving the district to take on military duty shall arrange with one of the practitioners in Geelong to attend those women in their confinements whom the former has undertaken to attend. In making the selection, the desires of the patient shall be taken into account. The practitioner who attends shall retain three-quarters of the fee (£4 4s.) in the case of primiparae, and two-thirds of the fee (£2 2s.) in the case of multiparae, and return one-quarter and one-third respectively to the representative of the absent practitioner. In the case of patients engaging the practitioner during the absence of the principal, the practitioner who attends shall retain the whole fee.
5. Country Journeys.—All fees for country journeys shall be retained by the practitioner carrying out the work.
6. Private Practice.—The fees earned in private practice shall be divided between the practitioner undertaking the work and the practitioner on military duty, in the proportion of two-thirds and one-third.

Every practitioner undertaking to attend the patients of a practitioner on military duty shall guarantee to return to the latter, in the event of his return to practice in Geelong,

or to the purchaser of his practice in the event of his death, as far as is possible, all the patients attended by the former on his behalf during his absence, and also all the transferable appointments taken over by the former during his absence.

All disputes shall be referred to the Ethical Committee of the Victorian Branch of the British Medical Association.

#### Ballarat.

The Ballarat Division has adopted the principles of the Richmond Division's scheme. The details scheme of this Division will be formulated at a later date.

#### North Melbourne.

1. The fees for attendance in confinement, abortion and miscarriage cases, and for operations, shall be divided in equal parts between the practitioner on military duty and the practitioner carrying out the attendance. In the case of defaulters, the loss shall be borne equally.
2. Private Practice.—The locum tenens shall hand over to the principal all fees earned on the return of the latter.
3. Lodge Practice.—Patients shall not be transferred to the lists of other practitioners for a period of 12 months. The practitioner acting as locum tenens shall give his services gratuitously.
4. Anæsthetics.—The practitioner administering an anæsthetic shall retain the fee.
5. A card system shall be adopted. Blank spaces shall be provided for the names of medical practitioners willing to act during the absence of a practitioner.
6. The person directing the patients to the practitioners undertaking to act as locum tenens shall keep a list of these patients, with the names of the practitioners to whom they have been referred.

#### Brunswick.

1. Any practitioner wishing to undertake military duties who fails to obtain the services of a locum tenens shall have his work carried out for him by one or more of his fellow practitioners in the district. The fees earned in this manner shall be divided in equal parts between the practitioner undertaking the work and the absent practitioner.

The members of the Council expressed the opinion in very definite terms that there were many reasons in favour of insisting on a modification of the Director-General of Medical Services' scheme. It was pointed out that were remuneration accepted for the services rendered, the military authority would have the right to enlist every practitioner concerned in the Reserve, and if required they could be called upon to perform any service, either at home or abroad, even at short notice. Dr. Todd, the Honorary Secretary of the New South Wales Branch, who, with Dr. W. N. Robertson, of Brisbane, and Dr. F. S. Hone, of Semaphore, South Australia, had been invited to attend the meeting, explained the position obtaining in the New South Wales Branch. After further debate, it was resolved that the Council recommend the Branch to adopt the resolution passed by the New South Wales Branch on July 30, 1915, (See *The Medical Journal of Australia*, August 7, 1915, p. 132.) It was further resolved that a special meeting be called for August 18, for the purpose of considering this matter.

A debate was opened by Dr. Wilkinson, who called attention to the unsatisfactory position which was being created by the want of co-operation between the military and the civil authorities in the treatment of patients suffering from epidemic cerebro-spinal meningitis. Dr. Wilkinson moved that all cases of this disease should be treated under one roof. No material disagreement was voiced as to the desirability of this, but Professor Berry raised a further issue, on which opinions were more or less divided. He pointed out that it was by no means clear how these cases should be dealt with, both from a prophylactic and from a therapeutic point of view. In view of the undoubted menace to the community, he put in a strong recommendation that Medical Officers of Health, military medical officers with experience of epidemics, and others who had studied epidemiology should meet in conference with a view of elaborating a programme having for its object the arrest of the epidemic. The members were unwilling to adopt this recommendation as the first and only step in connexion with



the matter, and therefore threw Professor Berry's proposal out when it was moved as an amendment to the original motion of Dr. Wilkinson. After the passage of the original motion, Professor Berry's amendment, dressed in a slightly different garb, was brought up as a separate proposition, and was again the subject of a highly diverting discussion. It was held by a number of members that no good purpose would be served if a conference were called by the Branch, inasmuch as it did not possess any powers to carry into effect any recommendation agreed upon. The debate, however, served a very useful purpose in defining the points on which agreement was present, and it was eventually determined that the views of the Council should be brought to the notice of the Minister for Defence and the Minister of Public Health, as well as that of other responsible persons. In the course of the debate, the question of the administration of military hospitals and the wider issues of staffing and management of military hospitals received considerable attention.

#### Australasian Medical Publishing Company.

A meeting of the Directors of the Australasian Medical Publishing Company was held in Melbourne on August 12, 1915. At the termination of the meeting a meeting of the Company was held.

At the meeting of the Directors the Secretary's report, the Editor's report, and the balance-sheet and profit and loss account, together with the Auditor's report, were received and adopted. A draft report of the Directors for presentation at the general meeting was considered and amended.

The Directors' report, as amended, was submitted to the general meeting of the Company, and was adopted. The report is as follows:—

#### AUSTRALASIAN MEDICAL PUBLISHING COMPANY, LIMITED.

##### ANNUAL MEETING, AUGUST 12, 1915.

##### DIRECTORS' REPORT.

The Directors submit their Report and the Balance Sheet as at June 30, 1915, together with Profit and Loss Account for the 12 months ended June 30, 1915.

The members will note that within five weeks of the date, July 4, 1914, of the issue of the first number of *The Medical Journal of Australia*, the British Empire suddenly became involved in the great war which is still raging. The effect upon the medical profession was immediate. Already some 25 per cent. of the practitioners in Australia are occupied wholly in naval or military service, and of the rest, while some are engaged in part-time service, practically all have been subjected to a great strain on their energies. The result has been that the supply of scientific and other contributions to the Journal has been considerably less than it would have been in normal times. The paper has, nevertheless, successfully maintained a high standard of excellence as a Medical Journal, and has firmly established itself in every State of the Commonwealth as the official organ of the Branches of the British Medical Association. The financial side of the Company's operations has suffered no less than the literary. Advertisements have been scarce, and the cost of production has been high. The business, however, for the year, as indicated by the statement of accounts, has been at least as satisfactory as could be expected under the circumstances. In fact, the success of the paper during its first year, and the loyalty shown by the members of the British Medical Association towards it, augur well for its rapid growth and extended usefulness when the distractions and disturbances of the war are over.

In Hobart the medical profession has been in conflict with the Government in regard to certain matters, which necessitated a very definite attitude being assumed by the Journal. Unfortunately the Medical Officer of Health of Hobart, Dr. McClintock, has taken exception to certain remarks appearing in an article in reference to his connection with these matters, and has commenced legal proceedings against the Company in an action at law for defamation. This course of events is much to be regretted, but, as

the questions in issue are still *subjudice*, it is not appropriate to discuss either the case or its merits.

W. N. ROBERTSON, Chairman.  
R. H. TODD, Secretary.

Dr. G. Sprott and Dr. A. J. H. Saw retired from the Board in accordance with the Articles of Association. They were re-elected.

Messrs. L. S. Drummond and Co. were appointed Auditors for the ensuing year, and it was determined that a fee of 15 guineas be paid for the audit.

#### HEALTH OF VICTORIA.

The following notice, dealing with epidemic cerebro-spinal meningitis, appeared in the Victoria Government Gazette, of August 11, 1915:—

Whereas it appears to the Minister of Public Health that the whole of the State of Victoria is affected by the dangerous, infectious or contagious disease known as Cerebro-spinal Meningitis: Now therefore His Excellency the Governor of Victoria by and with the advice of the Executive Council thereof and in pursuance of the provisions of Section 125 of the "Health Act, 1890," doth hereby require and direct all medical practitioners and registrars of births and deaths to report all cases of such disease in such State. Every such practitioner and registrar shall, immediately on any such case coming to his knowledge, report it by telegram to the Board of Health, and to the council of the municipal district in which the case is, and such telegram shall contain—

- (a) Name and address of patient.
- (b) Age and sex of patient.
- (c) Signature of notifier.

And the Honorable J. Drysdale Brown, His Majesty's Minister of Public Health for the State of Victoria, shall give the necessary directions herein accordingly.

Up to the afternoon of August 13, 1915, 45 cases of this disease had been notified to the Civil Authority. Of the 45 patients 7 were soldiers, who were on leave at their homes when they fell ill. The epidemic dates back to May 14, 1915.

#### THE DEATH OF A MEDICAL AGENT.

Ludwig Hermann Bruck, senior partner in the firm of Messrs Bruck & Thomson, of Sydney, died in the Sydney Hospital on August 14, 1915, presumably of chloroform poisoning. It appears that Mr. Bruck did not return home in the afternoon, as was his wont. He was therefore sought in his office, and found unconscious, seated on a chair. The following letter, addressed to his partner, provides an explanation for his act:—

"I cannot tell you how terribly grieved I am of being the cause—though unintentional—of the firm being prosecuted for trading with the enemy, especially as you are innocent in the matter, and the only way I can see to get out of it is for me to make an end of my life, as they cannot prosecute a corpse. And it will also relieve you of your German-born partner, who, considering all the present circumstances, is better out of the way. To save an inquest, you can tell the Coroner that I have taken poison, and, to make quite sure, I have poured  $\frac{1}{4}$  lb. of chloroform on my handkerchiefs to lay my face on. When you read this letter, I shall be dead about 42 hours, therefore you had better get the undertakers to take my body across the road to their place of interment. As I cannot be cremated, I wish to be buried in the Freethinkers' Division of the Rookwood Cemetery. I do not want my funeral advertised, nor do I want anyone to follow my remains; also please do not close the establishment for a minute for my sake.

"Dear Mr. Thomson, I trust you will believe me when I state that I had no intention of transgressing against the law, and if I had only studied the proclamation, all would have been well. However, it was my fate, and cannot be helped. Please deliver letter to Mr. Laurance, and packet and letter to my wife, and I hope that occasionally you will give your late partner a kind thought, and if at any time I have given you pains and distress of mind, as in the present case, I am sincerely sorry for it, and I know you will forgive me.

"On my behalf please say 'good-bye' for ever to Mrs. and the Misses Thomson, Mr. Ford, our staff, and all my friends who make inquiries after me. Tell them that I am a victim of the war.

"Yours until death,

"L. BRUCK.

"P.S.—I leave you my gold-mounted office umbrella as a keepsake of your late partner.—L.B."

Mr. Bruck was the proprietor and founder of our predecessor, *The Australasian Medical Gazette*. During the first 14 years of its existence, the *Gazette* was a private venture of Mr. Bruck's, although it purported to be the official organ of the Victorian, South Australian and New South Wales Branches of the British Medical Association. The Editors during this period were Dr. F. Milford and the Hon. J. Mildred Creed, M.L.C. In 1894 the New South Wales Branch purchased the *Gazette* from Mr. Bruck.

Mr. Bruck has enjoyed the confidence of a large number of medical men in Australia in his capacity as a medical agent, and for a considerable time he took an active interest in the work of the Association. In 1896 he published a valuable, though small, pamphlet dealing with the sweating of the medical profession by the Friendly Societies. The information contained in this book, and the outspoken exposure of the methods adopted by some of the lodges has formed a basis on which much of the organization of the medical profession in New South Wales and elsewhere has been built up.

## Correspondence.

### WHITE AUSTRALIA PROBLEM.

Sir,—Professor Berry, in his letter, claims that another scientific expedition is necessary to determine the settlement of tropical Australia. At the present time, would not Prof. Berry serve the community better if he undertook to confirm the truths of the following statements. —

(1) That man, in the tropics, demands the protection of pigment to be an effective and economic worker in the sun.

(2) That race evolution proceeds by miscegenation.

The recognition of these truths is fundamental in teaching a solution of the problem of Australian settlement. They should offer no difficulty to an anthropologist. The one is a question of physics and physiology and the other a question of history and ethnology.

Yours, etc.,

M.B. (Melb.).

August 14, 1915.

### VARICOCELE AND SERVICE EFFICIENCY.

Sir,—I am in agreement with a good deal of what Dr. Scot Skirving has to say on this question. Each case has to be, and is, I think, as a rule, judged on its own merits.

From my experience during the last year in examining applicants for service who have been operated on for varicocele recently, that is, within the previous three months, the results of operation, to my mind, often constitute a greater bar to immediate service than the original varicocele.

I have necessarily been interested in the criticisms levelled at the strictness of medical examinations. Those I have read have invariably missed one exceedingly important point, *viz.*, that once a man is admitted with a bodily defect which he knows of at the time or learns about later, he is not only a potential inefficient, but very definitely a potential claimant for compensation. This is a big fact that an examining medical officer has always to keep in mind if he is to safeguard the interests of the service he represents.

Many such men soon acquire from advertisements in daily papers or elsewhere an astonishing amount of information as to what they ought to have wrong with them. There is always the "Government cow" to be milked, and it is a great training in the study of human nature to find how useful, in this connexion, trivial physical defects can be made.

I do not know if Dr. Scot Skirving has sat on any Boards of Medical Survey. If he has, I am rather surprised to find

that he is not more sympathetic than he apparently is with the service point of view.

Yours, etc.,

A. WALLACE WEIHEN, M.D.,

Acting District Naval Medical Officer.

183 Macquarie Street, Sydney,

August 14, 1915.

Sir,—It was with much interest that I read the letter of Dr. Scot Skirving on the question of varicocele and recruiting. Having had considerable experience in England upon this matter, I venture to state the following points, which may be of interest. While holding resident appointments at the London Hospital, over twenty years ago, a great number of young men were admitted for the operation, *i.e.*, varicocele. Men, otherwise healthy, anxious to join the army, navy, police force or post office, were rejected on account of varicocele, however slight, unless an operation were performed. On showing a scar, as evidence that the operation had been done, they were admitted. I remember a very distinguished surgeon stating on one occasion, before a large number of students, that the operation in the great majority of cases was unnecessary, but that the reason why candidates were rejected for the public services, unless the operation had been performed, was that the presence of a varicocele might lead to malingering, with the object of being put on the sick list.

The surgeon in question was no less an authority than Mr. (now Sir) Frederick Treves.

I do not wish to state any further points, beyond thoroughly endorsing Dr. Harlin's letter. The neurotic element, plus quack advertisements, especially regarding sexual matters (masturbation, etc.) are far more important elements to deal with, not with the knife, but by careful persuasion and healthy companionship. The drill sergeant is the best treatment for the majority of cases of varicocele I have seen in this country.

Yours, etc.,

G. W. FARMER, M.B., M.Ch. (Oxon.), F.R.C.S.

Texas, Queensland,

August 9, 1915.

### EPIDEMIC CEREBRO-SPINAL MENINGITIS.

Sir,—The urgency of adopting some simple method in the treatment of contacts and others liable to infection by the germ of cerebro-spinal meningitis impels me to write, suggesting an easy, and I hope efficacious, method of dealing with the problem, *viz.*, inversion douching of the nose and nasopharynx, as used by rhinologists in lieu of spraying. The method is as follows:—The patient is placed in the supine position, the shoulders parallel with the end of the stretcher or couch (or rolled up knapsack), the head hanging vertically down (the neck muscles being relaxed to allow of this) so that the plane of the anterior nares is parallel with the ground somewhat in the position in which some surgeons operate for post-nasal growths. The patient is now told to open the mouth, and continue breathing through the mouth for the rest of the operation. The solution to be used (say, *e.g.*, sanitas: one pint to five of warm normal saline solution or potass. permanganate 1:1,000 in warm saline) is now poured into each nostril from some vessel with a lip, or from a douche can with rubber tube connexion, till the nose and naso-pharynx are filled with the solution, which will then overflow and run into the eyes. Breathing comfortably through the mouth the solution can now be retained from five to twenty minutes, with practice. The patient, when finished with, is told to turn quickly on to his side, and the solution, flowing out from the nose, is received into a vessel containing antiseptic solution. Only two points need to be remembered: (1) keep the head hanging as vertically as possible, else the solution will flow down on to the base of the tongue and epiglottis, and cause coughing; (2) the same result will happen if there be any attempt at nasal aspiration. There is an obvious superiority in this method over that of spraying, as a spray falls on a vertical surface, those drops falling on the highest portion begin to roll down at once under the influence of gravity, their contact with that part being only momentary; also a spray cannot penetrate and cover every part of the nose

cavity and nasopharynx, whereas, by filling up the nose every part is in contact with the solution almost at once, and as long as the head is kept in the correct position. Again, the necessity for the use of a spray, which is liable to get out of order, is done away with.

The non-commissioned officers of a unit could be shown the method, and they could then do a whole camp in a short time, given the discipline and thoroughness of our Hunnish antagonists.

Yours faithfully,

H. P. SHORNEY, M.D., F.R.C.S.

August 11, 1915.

### Medical Appointments.

Dr. G. S. Landon has been appointed Honorary Medical Officer at the Fremantle Public Hospital, in the place of Dr. Lotz (resigned).

Dr. W. E. Blackall has been appointed Honorary Medical Officer at the Fremantle Public Hospital, during the absence on leave of Dr. A. T. White.

Dr. J. I. Parer has been appointed Honorary Medical Officer at the Fremantle Public Hospital, during the absence on leave of Dr. T. L. Anderson.

Dr. W. H. Mackie has been appointed Acting District Medical Officer and Public Vaccinator, Narrogin, during the absence on military service of Dr. J. B. Lewis.

Dr. F. C. Thompson has been appointed Acting Medical Officer of Health to the Bayswater Road Board, Western Australia, during the absence on leave of Dr. D. M. McWhae.

Mr. Francis Charles Siekmann, J.P., has been appointed temporarily to the position of City Coroner of Perth, during the absence of Dr. R. S. Rogers on military hospital duties.

Dr. B. H. Morris, Inspector-General of Hospitals, of Western Australia, has been appointed an officer of the first class in the Professional Division of the Civil Service.

### Medical Appointments Vacant, etc.

For announcements of medical appointments vacant, assistants, locum tenentes sought, etc., see "Advertiser," page ix.

Ararat Hospital, Resident Medical Officer.

Wilcannia and District, Medical Officer.

Brisbane Hospital, Resident Medical Officers.

Children's Hospital, Perth, Resident Medical Officer.

### Diary for the Month.

- Aug. 24.—Vic. Branch, B.M.A., Eye and Ear Section.
- Aug. 25.—Vic. Branch, B.M.A., Council.
- Aug. 27.—N.S.W. Branch, B.M.A., Ordinary.
- Aug. 27.—Melb. Hosp. Clin. Soc.
- Aug. 31.—N.S.W. Branch, B.M.A., Organization and Science Committee, Medical Politics Committee.
- Sept. 1.—West. Suburbs Med. Assoc., N.S.W.
- Sept. 1.—Vict. Branch, B.M.A., Monthly.
- Sept. 3.—Queensland Branch, B.M.A., Monthly.
- Sept. 8.—Cent. South. Med. Assoc. (Queanbeyan), N.S.W.
- Sept. 8.—Melb. Pediatric Soc.
- Sept. 8.—South Sydney Med. Assoc., N.S.W.
- Sept. 9.—Vict. Branch, B.M.A., Council.
- Sept. 10.—N.S.W. Branch, B.M.A., Clinical. Last day for nomination of candidates for election of two members of Federal Committee.
- Sept. 10.—South Aust. Branch, B.M.A., Council.
- Sept. 14.—Tasmanian Branch, B.M.A., Monthly and Council.
- Sept. 15.—West. Aust. Branch, B.M.A., General.
- Sept. 17.—Queensland Branch, B.M.A., Council.
- Sept. 21.—N.S.W. Branch B.M.A., Executive and Finance Committee; Ethics Committee.

Covers for binding *The Medical Journal of Australia* for Vol. I., 1915, can be obtained on application to the Manager, B.M.A. Building, 30-34 Elizabeth Street, Sydney. The price of a cloth cover is 2s., and of half leather 3s. 6d.; postage, 7d.

### Important Notice.

Medical practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429 Strand, London, W.C.

Branch.	APPOINTMENTS.
<b>QUEENSLAND.</b> (Hon. Sec. B.M.A. Building, Adelaide Street, Brisbane).	Brisbane United F.S. Institute. F.S. Lodges at Longreach.
<b>WESTERN AUSTRALIA.</b> (Hon. Sec. 230 St. George's Terrace, Perth).	Swan District Medical Officer. All Contract Practice Appointments in W.A.
<b>NEW SOUTH WALES.</b> (Hon. Sec. 30-34 Elizabeth Street, Sydney).	Australian Natives Association. Balmain United F.S. Dispensary. Burwood District F.S. Institute. Canterbury United F.S. Dispensary. Goulburn F.S. Association. Leichhardt and Petersham Dispensary. M.U. Oddfellows Med. Inst., Elizabeth Street, Sydney. Marrickville United Friendly Societies' Dispensary. Mullumbimby District Friendly Societies. N.S.W. Ambulance Association and Transport Brigade. N. Sydney United F.S. People's Prudential Benefit Society. Phoenix Mutual Provident Society. F.S. Lodges at Braidwood. F.S. Lodges at Casino. F.S. Lodges at Lithgow. F.S. Lodges at Mudgee. F.S. Lodges at Orange. F.S. Lodges at Parramatta, Penrith, and Auburn. F.S. Lodges at Wellington. Newcastle Collieries— Killingworth. Seaham Nos. 1 and 2. West Wallsend.
<b>SOUTH AUSTRALIA.</b> (Hon. Sec. 3 North Terrace, Adelaide).	The F.S. Medical Assoc. Incorp., Adelaide.

### EDITORIAL NOTICES.

Manuscripts forwarded to the office of this Journal cannot under any circumstances be returned.

Original articles forwarded for publication are understood to be offered to "The Medical Journal of Australia" alone, unless the contrary be stated. All communications should be addressed to "The Editor," "The Medical Journal of Australia," B.M.A. Building, 30-34 Elizabeth Street, Sydney, New South Wales.

The Librarian of the New South Wales Branch has called our attention to the fact that the following issues of the *Lancet* have been borrowed some time ago, and have not yet been returned. The member who has these copies in his possession is respectfully requested to return the same as soon as possible, in order that the volume may be bound: January 2, 9, 16, 23, 30, February 6, 13, 20, April 24, and May 29.

The Librarian of the Victorian Branch will be pleased if any member possessing spare copies of the following journals will present them to the library, in order to complete the sets:—

*Lancet*, October 3, 1914, April 10, 1915, and subsequent numbers.  
*Practitioner*, September to December, 1914, January and February, 1915.